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ABSTRACT

This book for state early childhood licensing administrators addresses the problem of obtaining systematic and reliable information about the operation of an early childhood or child care program. The book: (1) provides an introduction to early childhood program evaluation; (2) describes systematic observation techniques; (3) discusses summative and formative program evaluation techniques and general characteristics of evaluation; (4) considers the distinctions between program evaluation and program monitoring in terms of conceptual differences and design elements that help to build an assessment and measurement paradigm; (5) details the state of the art in formative evaluative and program analysis instruments and systems, with particular attention to Day's Early Childhood Education: An Ecological Approach, Prescott's Day Care Environment Inventory, Harms and Clifford's Early Childhood Environment Rating Scale, Fiene's Child Development Program Evaluation System, the Assessment Profile for Early Childhood Programs, the California Child Development Quality Review System, the California Infant Toddler Program Quality Review Indicator System, and the National Academy of Early Childhood Program's Accreditation System; and (6) covers impact, management, and cost evaluation studies. (RH)

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EARLY CHILDHOOD RESEARCH AND EVALUATION
FOR STATE LICENSING ADMINISTRATORS

Richard Fiene, Ph.D.

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EARLY CHILDHOOD RESEARCH AND EVALUATION
FOR STATE LICENSING ADMINISTRATORS

Richard Fiene, Ph.D.

August 1990

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Chapter 1

This chapter provides an introduction to early childhood program evaluation. It also provides a contextual framework to guide the reader to where program evaluation fits into the overall early childhood program. The particular approach taken in this text is to use evaluation in order to measure the early childhood program effects on child development outcomes and to obtain periodic feedback about a particular early childhood program. More specifically an attempt is made in this text to answer some of the following research and evaluative questions: How do children benefit from participation in a child care/early childhood program? Does spending more money in a child care program increase the quality of the program? How well do staff carry out the mission or program rationale of an early childhood program? Does compliance with state child care regulations have a positive impact on child development? What specific characteristics of programs should be monitored on an ongoing basis?

A functional definition of evaluation is to collect information to form judgements in order to make decisions. The key word that is emphasized throughout this book is "information". A major problem in the early childhood program evaluation field is obtaining systematic valid and reliable information about the operation of an early childhood/child care program. This is a problem both at the local level as well as at the state and national levels. The only exception has been large scale formalized research and evaluation studies that assess impacts of various programs--examples will be provided in chapter 6.

However, more informal types of evaluations have been horrendous in producing valid and reliable information that can be used to improve the quality of early childhood programs. The major problem is in asking the particular evaluation questions. Where does one begin to address the content that can be part of an evaluative question. The most logical place to begin is with a comprehensive program plan. This is the key organizational document for any early childhood/child care program. It is more than a curriculum or activity plan. Organizationally the comprehensive program plan should include the following but is not limited to these general areas: philosophical orientation, theoretical viewpoints, developmentally appropriate curriculum, physical environment, and evaluation strategy or scheme for the program.

Comprehensive Program Plan

The program plan is the blueprint or strategic plan for having and implementing the early childhood/child care program. Without such a document it is difficult for the director or teachers to fully understand and communicate to the community and parents about their orientation and philosophy--what is the purpose of the program, why was the program established? The concept of the comprehensive program plan is taken from Seaver and Cartwright's excellent text on **Child Care Administration.** The interested reader should consult this textbook for a detailed discussion of this concept and its implications for the overall early childhood program. Also, Decker and Decker have several excellent chapters in their textbook on **Planning and Implementing Early Childhood Programs** that deal with similar issues regarding program plans. In this text the comprehensive program plan will only be addressed from an evaluative perspective. It is the baseline or beginning point for conducting evaluations of an early childhood/child care program.

In the development and implementation of the comprehensive program plan there should be a consistent link between theory, philosophy and practice. The following design elements should be raised when assessing the program plan.

The first critical design element that should be addressed by the program plan is the basic daily care pattern which includes: arrival, breakfast, morning activity, snack, lunch, rest, afternoon activity, and departure. A key component in the development of the daily care pattern are the people who have been involved in its development. A major consideration is that the daily pattern has been adjusted regarding the sequence and timing to reflect local contributing factors related to staffing, environmental design, materials, equipment, parents, and evaluation of the program.

There should be a single person or committee that has been charged with the responsibility to coordinate, design and implement the program plan. This is critical for continuity that one person or a single ad hoc committee be charged with the project. Without having identified someone to staff it, the project and ultimately the plan will not get off the ground.

In developing the program orientation or philosophy has the person (usually the director) or committee surveyed local situations and biases or parents, staff, funding agencies and operational concerns. The program plan should not be developed in isolation. Also the feedback from these groups should occur throughout the implementation of the program and not just at the original startup. Based on the program viewpoint and input, a particular developmental theory has been selected such as maturationist (Gesell, Freud, Erikson) behaviorist (Skinner, Bandura) or cognitive (Piaget, Kohlberg). Once a particular developmental theory has been selected it will drive many of the other decisions of how the program is run. This is extremely important from an evaluation point of view because what can be assessed is the consistency in which a program implements its developmental theory rather than the particular theory that is selected. In other words, based on the developmental theory, the curriculum, materials, equipment, grouping strategy, etc. should all be selected in accordance to the theory.

A program rationale should have been developed that includes a statement of beliefs about the nature and course of development, developmental goals and objectives, role of the child and adult. This program rationale should then be distributed to staff and parents for their input and reactions and changed accordingly.

The remainder of the program plan should contain the following design elements.

All goals and objectives are tied to the program rationale and developmental theory and philosophy. Based on the goals and objectives the following components have been developed.

A staffing component that has the procedures and/or guidelines for routines and transitions. Identification and listing of teacher tasks. General teaching strategies based on the developmental theory for the program. Identification of the personal qualities desired in staff. A description of the relationship expected to be developed between children and staff, interaction style and technique, teacher role, and staff positions.

These components are taken from Seaver and Cartwright's **Child Care**

Administration textbook. Another vital source that not only these components mentioned in this chapter but that will be built upon throughout this text are the National Association for the Education of Young Children **Developmentally Appropriate Practice** and the **National Academy of Early Childhood Program Accreditation System.** The emphasis placed upon program analysis revolves around these two very important contributions to the early childhood field. They are used as the content and blueprint for the development and implementation of a high quality early childhood program. The ten component areas will be addressed repeatedly in the chapters and appendices of this book: interactions between staff and children, curriculum, parent and staff communication, staffing, staff qualifications, health and safety, nutrition, physical environment, administration, and evaluation.

To continue with the design elements of the remaining component areas. The next component is environmental design. This component should contain a physical setup of the center. Guidelines for discipline should be available and implemented by staff. Preventable measures, supervisory procedures, scheduling for activity blocks, handling of unacceptable behavior and general classroom management issues should be addressed in this component.

The next component's design elements to be dealt with address materials and equipment. Activities, topics, and/or experiences should be selected that will emphasize the developmental theory of the program. There should be a master outline of activity content. Objectives should be written for each major theme area. Objectives should be written in language appropriate for the program's developmental viewpoint. Daily, weekly, monthly, and yearly activity content and objective sequencing should be prepared. These components should constitute the curriculum plan document.

There should be general criteria used for the selection of materials and equipment. A master inventory of current items should be maintained and updated. There should be a prioritization list which is based on objectives and is used as a guide when purchasing materials and equipment.

Evaluation

The last component's design element is evaluation. Based on the program objectives the types of information needed to assess children's progress should be identified. Procedures and instruments to collect desired child assessment information should be selected or devised based on the program objectives. Written assessment procedures, validity and reliability testing should all be undertaken in the development of the instruments. There should be a periodic review of the plan, dissemination procedures, and a yearly concept review of the theoretical foundations of the program, along with an assessment of the daily match between the program plan and practice.

This chapter has dealt with the structure of where evaluation fits into early childhood education programs, but it has not dealt with the actual content. In order to deal with content, the **National Academy of Early Childhood Program's Accreditation System** is an excellent resource for determining the content of a high quality early childhood program. The NAECP system will be the focal point of this book. The NAEYC **Developmentally Appropriate Practice** will go hand in hand with the accreditation system as the key curriculum framework.

Because of the central focus of the accreditation system it is essential to list the goals and rationale for each component area as stated in the procedure and systems documentation. The first component deals with interactions among staff and children.

Interactions between children and staff provide opportunities for children to develop an understanding of self and others and are characterized by warmth, personal respect, individuality, positive support, and responsiveness. Staff facilitate interactions among children to provide opportunities for development of social skills and intellectual growth. All areas of young children's development--social, emotional, cognitive, and physical--are integrated. Optimal development in all areas derives from positive, supportive, individualized relationships with adults. Young children also develop both socially and intellectually through peer interaction.

The curriculum encourages children to be actively involved in the learning process, to experience a variety of developmentally appropriate activities and materials, and to pursue their own interests in the context of life in the community and the world (this is where the NAEYC **Developmentally Appropriate Practice** specific criteria fit in perfectly). The curriculum is not just the goals of the program and the planned activities but also the daily schedule, the availablilty and use of materials, transitions between activities, and the way in which routine tasks of living are implemented. Criteria for curriculum implementation reflect the knowledge that young children learn through active manipulation of the environment and concrete experiences which contribute to concept development.

Parents are well informed about and welcome as observers and contributors to the program. Young children are integrally connected to their families. Programs cannot adequately meet the needs of children unless they also recognize the importance of the child's family and develop strategies to work effectively with families. All communication between centers and families should be based on the concept that parents are and should be the principal influence in children's lives.

The program is staffed by adults who understand child development and who recognize and provide for children's needs. The quality of the staff is the most important determinant of the quality of an early childhood program. Research has found that staff training in child development and/or early childhood education is related to positive outcomes for children such as increased social interaction with adults, development of prosocial behaviors, and improved language and cognitive development.

The program is efficiently and effectively administered with attention to the needs and desires of children, parents, and staff. The way in which a program is administered will affect all the interactions within the program. Effective administration creates an environment which facilitates the provision of good quality care for children. Effective administration includes good communication among all involved persons, positive community relations, fiscal stability, and attention to the needs and working conditions of staff members.

The program is sufficiently staffed to meet the needs of and promote the physical, social, emotional, and cognitive development of children. An important determinant of the quality of a program is the way in which it is staffed. Well organized staffing patterns facilitate individualized care. Research strongly suggests that smaller group sizes and larger numbers of staff to children are related to positive outcomes for children such as increased interaction between adults and children, and less aggression, more cooperation among children.

The indoor and outdoor physical environment fosters optimal growth and development through opportunities for exploration and learning. The physical environment affects the behavior and development of the people, both children and adults, who live and work in it. The quality of the physical space and materials provided affects the level of involvement of the children and the quality of interaction between adults and children. The amount, arrangement, and use of space, both indoors and outdoors, are to be evaluated.

The health and safety of children and adults are protected and enhanced. The provision of a safe and healthy environment is essential. No amount of good curriculum planning or positive adult child interaction can compensate for an environment that is dangerous for children. Good quality early childhood programs act to prevent illness and accidents, are prepared to deal with emergencies should they occur, and also educate children concerning safe and healthy practices.

The nutritional needs of children and adults are met in a manner that promotes physical, social, emotional, and cognitive development. Children must be provided with adequate nutrition and also must be educated concerning good eating habits.

Systematic assessment of the effectiveness of the program in meeting its goals for children, parents, and staff is conducted to ensure that good quality care and education are provided and maintained. On going and systematic evaluation is essential to improving and maintaining the quality of an early childhood program. Evaluation efforts are based on program goals and assessment of needs and identify both strengths and weaknesses of program components.

This chapter delineated the standards of a comprehensive program plan that can be evaluated on several dimensions. Infact it should be the beginning point when you pose your evaluation question. The content standards are drawn from the National Association for the Education of Young Children's **Developmental Appropriate Practice** and **Criteria for Accreditation.**

The next two chapters present the two basic components of evaluation, assessment of children and program evaluation. Based on this chapter, these two chapters help to provide the background to doing evaluations of early childhood/child care program.

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NAEYC, **National academy of early childhood program's accreditation criteria and procedures,** Washington, D.C.: National Association for the Education of Young Children, 1984.

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Chapter 2

Assessment of children is used to refer to all those activities and processes one uses to learn about children's characteristics, activities, progress towards goals, strengths and weaknesses. These activities can be formal or informal. They are generally systematic with the ultimate goal to plan appropriate activities and to know the results of those activities.

The purpose and need for assessing children is to describe children's abilities as it relates to the early childhood program and to assess children's performance on standards related to program goals. The procedures that can be employed to address the purpose and needs can be accomplished through systematic observation.

Systematic observation techniques should have the following characteristics: 1) the particular domain of behavior of interest should be identified--social, cognitive, etc.; 2) the set of behaviors that exemplify the domain of interest should be specified in advance and easily observable; 3) a format for recording information should be articulated; 4) directions should be written. These characteristics should be present in all of the following observation and assessment techniques.

Anecdotal Records

Probably the most common form of observation used by teachers in the classroom. It is very informal and flexible. Factual descriptions of events and happenings in the everyday lives of children. Anecdotal records are like word pictures. A typical anecdotal record describes behavior in context--the time and place as well as the actions and dialogue. An anecdotal record may result from observing a single child or a small group of children during a certain period of time. By having a record of behaviors, teachers gain understanding or provide explanation for a specific behavior. A collection of these anecdotal records can show patterns of behaviors. Teachers may schedule anecdotal record observation to ensure that all children are observed frequently.

There are four basic types of anecdotal records: 1) running, 2) specimen, 3) time, 4) event. A running record records all behavior that is exhibited by a child. The teacher/observer does not select out particular behaviors to observe but writes down everything that occurs--all behaviors. Specimen anecdotal record is similar to a running record but it contains even greater detail than the running record. It is generally used by researchers. Time anecdotal record takes account of only certain behaviors that are likely to occur at particular times. All other behaviors are ignored. The event anecdotal record focuses on behaviors that are likely to occur in a particular setting, rather than during a predictable time. The interest in the event anecdotal record is to determine cause and effect behaviors.

There are five characteristics of anecdotal records: 1) the anecdotal record is the result of direct observation, 2) it is a prompt, accurate, and specific account of an event, 3) it includes the context of the behavior, 4) interpretations of the incident are recorded separately from the incident, and 5) it focuses on behavior that is either typical or unusual for the child being observed.

Checklists

Probably the second most used form of observation by teachers in the classroom. Checklists are specific lists of statements describing a performance or a product. A checklist is a tool or instrument where a teacher generally does observations in a timed or event specific fashion making recordings on a checklist. They are useful in situations where an observer wants to record whether a particular behavior was demonstrated. Always in a dichotomous format--yes/no format or pass/fail format. Checklists differ from anecdotal records in that checklists contain statements of behaviors that can be anticipated and therefore listed on the instrument or tool, whereas anecdotal records are best used for recording spontaneous streams of behavior.

Two examples of checklists that can be used with young children in the early childhood/child care area are the Portage Project Checklist and the Project Memphis Checklist. Both checklists cover several developmental areas (language, social, emotional, etc.) for infants, toddlers, and preschool children. Both instruments can be used with special needs as well as normal children.

The advantages of checklists are the following: they are flexible to use; the teacher can evaluate in the most convenient manner and obtain the needed information easily; behavior can be recorded frequently because the specific behaviors are recorded on the tool or instrument ahead of time.

The disadvantages of checklists are the following: they can be time consuming to administer and to develop (this is a concern with all evaluative methods--they do take time so one must make the time); checklists do not indicate how well a child performed (unlike a test that can be used to record levels of mastery); checklists only indicate if the child can perform adequately or not; the observer/teacher is limited by the behaviors selected ahead of time (it's important to determine ahead of time very clearly the use of the particular checklist so that you do not find that some other behavior is more important than the ones you are collecting).

Portage Project Checklist

The Portage Guide to Early Education is designed for children whose mental ages are from birth to five years. The materials have been useful in educational planning with children who are handicapped in one or more areas of growth and development, as well as with children who are functioning normally.

The checklist was developed by identifying behaviors from a variety of preshool developmental scales and tests. These included the **Alper-Boll Developmental Skills Age Inventory**, the **Cattell Infant Intelligence Scale, Peabody Picture Vocabulary Test, Vineland Social Maturity Scale, the Sheridan Scale, the Gesell,** the **Slossen Intelligence Test for Children and Adults, the P.A.C., the Preschool Attainment Record,** and the **Stanford Binet Intelligence Scale.**

The checklist is meant to serve as a guide to teachers, nurses, aides, parents and anyone else needing to assess a child's present behavior in order to plan realistic goals that lead to additional skills. The behaviors listed on the Checklist are based on normal growth and development patterns.

The checklist deals with the following developmental areas: cognition--is the ability to remember, see or hear likenesses and differences, and to determine relationships between ideas and things. Self-help: is concerned with those behaviors of the child which enable him to care for himself in the areas of feeding, dressing, bathing and toileting. Motor--is primarily concerned with the coordinated movements of large and small muscles of the body. Language--is the ability to receive and understand information and show meaning through speech, gesture or writing. Socialization: are those appropriate behaviors that involve living and interacting with other people.

MEMPHIS Comprehensive Developmental Scale

The MEMPHIS Scale is part of an overall evalution and training model for special needs children. The purpose of the scale is to assess developmental status in five developmental areas: personal social skills, gross motor skills, fine motor skills, language skills, and perceptuo cognitive skills. The instrument is to be used with preschool level children with suspected or established developmental deficiences or handicapping conditions. It is to be administered by teachers in a classroom setting through information gained by personal observation of the child or information given to the teacher by others knowledgeable about the child.

The intended use of the scale is that of a quickly administered screening and programming device, not a precise measurement of development. The scores should be used as rough estimates of the child's developmental levels for purposes of gaining information about deficiencies and needed educational treatment emphasis. Information gained from administration of the scale should be used for educational program planning and not psychological or developmental diagnosis. The scale should also be used in conjunction with established standardized developmental scales if possible to insure maximum information on the child.

Evaluating Children's Progress in Day Care

This checklist was developed by the Southeastern day care project from known standards of normal development for children. The checklist rating forms are different from other tests or guides. They are easy to use. An advantage of the checklist is that it can be used by teachers in the classroom.

The three checklists summarized in this section are all intended to be used by teachers in a classroom setting which is different than the more standardized measures that will be summarized later in this chapter.

Since the items on the checklist are specific outcomes, things one can see, experiences that are part of a child's everyday world, the ratings are made part of the daily activities for a child.

A slight difference in this checklist as versus the first two that were summarized is that the first two and a half years of a child's development is chronologically oriented while from two years of age and above the checklist is oriented to developmental areas. The first two checklists were totally oriented to developmental level. The same developmental levels are covered in all three basically.

Rating Scales

Rating scales go one step further than checklists in that they have specific levels of behavior or events that build one upon the other. They use graduated measures for assessing behavior levels. Rating scales require a judgement about the quality or degree of a behavior rather than a simple yes/no or pass/fail decision and format about whether the behavior occurred. For this reason, each item is accompanied by a scale that presents qualitatively different levels of performance.

The advantages of rating scales are the following: rating scales can be used for behaviors not easily measured by other means. Rating scales are quick and easy to complete. Rating scales are fairly easy to develop and use.

The disadvantages of rating scales are the following: rating scales are highly subjective. Ambiguous terms cause rating scales to be unreliable sources of information. Rating scales tell little about the causes of behavior. An event anecdotal record would be more effective in determining the causes of behavior if that is the specific purpose of the evaluation exercise.

An example of a rating scale for children is the Preschool Behavior Rating Scale. This is a good example of a scale that is specific to the early childhood area and measures several child development levels at this age range.

Preschool Behavior Rating Scale

The Preschool Behavior Rating Scale (PBRS) is a rating scale for use by teachers. It measures, from a developmental point of view, children's preschool behavioral skills in the psychomotor, cognitive, and social areas. The PBRS is intended specifically for children from 3 to 6 years old who are enrolled in day care, Head Start or regular nursery settings. The two main purposes of the scale are: 1) to enable preschool personnel to monitor progress in development over time; 2) to enable preschool personnel to identify young children who show incipient or manifest developmental difficulties.

The PBRS provides useful information about children's preschool behavioral skills and indicates whether they are typical, questionable or atypical. Reliability and validity indices have been established. Norms are based on a cross sectional sample of 1367 children.

The advantages of the scale are that it is both easy to use and to score and that it is cost and time efficient. The PBRS has proved acceptable to both parents and preschool personnel, who appreciate the fact that it does not label or catergorize a child. The scale can only determine that, based on objective criteria, there is a valid cause for concern if a child's preschool behavioral skills remain below the typical range.

An excellent resource to find other developmental checklists and rating scales can be found in Simon & Boyer's **Measures of Maturation** and **An Anthology of Classroom Observation Instruments,** published by Research for Better Schools, Center for the Study of Teaching. These two books contain early childhood observation systems as well as classroom observation systems many of which could be used in particular classroom.

Standardized Tests

Standardized tests are formal methods of assessing children's progress and have the following characteristics: they contain specific directions for administering the test, these directions are stated in detail usually the exact words to be used by the examiner in giving directions to the child. Specific directions are provided for scoring. Norms are supplied to aid in interpreting scores. Information needed for judging the value of the test is provided.

Standardized tests are generally not administered by teachers in the classroom. Generally a psychologist administers standardized tests.

Advantages of standardized tests are the following: if the directions are followed exactly, test administration is very uniform. They give quantifiable scores. They are norm referenced. Generally the validity and reliability have been determined.

Disadvantages of standardized tests are the following: they are culturally biased. Children could be labeled by tests if they do not score very well. Teachers could fall into the trap of curriculum teaching for tests.

Standardized tests are of two types: norm referenced and criterion referenced. This is an important distinction in the way that results of observations are interpreted. Norm referenced tests yield information that is designed to assess a child relative to norms for children of the same age. They are useful injudging whether a child is making normal progress compared to other children. Criterion referenced tests assess children on their progress toward goals and objectives rather than against the performance of other children. Their value is their emphasis on individual performance. The present trend is to design tests that are both norm and criterion referenced.

Examples of norm referenced tests are the following: **Stanford Binet Intelligence Test, Bayley Scales of Intelligency, Minnesota Preschool Scale,** and the **Peabody Picture Vocabulary Test.** There are many other norm referenced tests but for this book these are tests that have been used within the context of other chapters within this text book. Also they are very interrelated in how they were developed with the Stanford Binet as the standard for development. The selection of the tests review in this chapter was based on the interrelationship of the specific tests as well as their relevance to other chapters in the book (See **Buros Manual** also).

Examples of norm and criterion referenced tests are the following: the **Preschool Attainment Record, the Vineland Social Maturity Scale, and the Verbal Language Development Scale.** The **Vineland Social Maturity Scale** was the standard in the development of the other two scales. In fact they are expansions of the Vineland in specific areas.

An example of a criterion referenced test is the following: the **Denver Developmental Screening Test.** This is a handy short and concise screening test where a teacher can get a snap shot of a child's development. A real advantage of the **Denver Developmental Screening Test** is a teacher can administer it. With the above norm and criterion referenced tests this probably would not be the case. A psychologist would administer those.

Stanford Binet Intelligence Test

The Stanford Binet is probably the standard against which all other standardized tests are measured. It was the first standardized test that became popular for assessing the general intelligence of children. The Stanford Binet has had three major revisions--1916, 1937, and 1960. It measures both verbal and non verbal aspects of intelligence. It starts developmentally at two years of age and goes to adult level. It is chronologically orientated and not developmentally oriented.

The Stanford Binet specifically has items that measure knowledge of vocabulary, word combinations, identifying objects by use, identifying parts of the body, obeying simple commands, repeating two digits and three digits, stringing beads, block building, copying a circle, drawing a vertical line, making comparisons, sorting buttons, comprehension items, naming objects from memory, pictorial identification, analogies, paper folding, identifying similarities and differences, maze tracing, memory tracing, memory for stories, naming the days of the week, and problem situations.

The above items are taken from the preschool portion of the test. The test should always be administered by a psychologist or psychometrician.

Peabody Picture Vocabulary Test

The Peabody Picture Vocabulary Test (PPVT) requires no special preparation other than complete familiarity with the test materials, including practice in giving the instrument prior to its use as a standardized measure. It is extremely important for the examiner to know the correct pronunciation of each of the words to be administered. Webster's New Collegiate Dictionary has been used as the authority. If all the instructions are strictly observed, psychologists, teachers, speech therapists, physicians, counselors, and social workers should be able to give the scale accurately.

There are two scoring forms for the Peabody. Directions for administering and scoring Forms A and B of the PPVT are identical. The PPVT on the average takes 10 to 16 minutes to adminster. The scale is administered only over the critical range of items for a particular subject.

The fact that teachers can administer the test and the ease of administration, and the shortness of time administration make the PPVT a highly reliable, efficient and effective standardized assessment tool.

Bayley Scales of Infant Development

The Bayley Scales of Infant Development are desigend to provide a tripartite basis for the evaluation of a child's developmental status in the first two and one-half years of life. The three parts are considered complementary, each making a distinctive contribution to clinical evaluation.

The mental scale is designed to assess sensory perceptual acuities, discriminations, and the ability to respond to these; the early acquisiiton of object constancy and memory, learning, and problem solving ability; vocalizations and the beginnings of verbal communication; and early evidence of the ability to form generalizations and classifications, which is the basis of abstract thinking. Results of the administration of the mental scale are expressed as a standard score, mental development index.

The motor scale is designed to provide a measure of the degree of control of the body, coordination of the large muscles and finer manipulatory skills of the hands and fingers. As the motor scale is specifically directed toward behaviors reflecting motor coordination and skills, it is not concerned with functions that are commonly thought of as mental or intelligent in nature. Results of the administration of the motor scale are expressed as a standard score, psychomotor development index.

The infant behavior record is completed after the mental and motor scales have been administered. The IBR helps to assess the nature of the child's social and objective orientations toward his environment as expressed in attitudes, interests, emotions, energy, activity, and tendencies to approach or withdraw from stimulation.

Vineland Social Maturity Scale
Verbal Language Development Scale
Preschool Attainment Record

These three scales, **the Vineland Social Maturity Scale, Verbal Language Development Scale,** and the **Preschool attainment record** are all interrelated. The **Verbal Language Development Scale** and **Preschool Attainment Record** are extensions and elaborations of the **Vineland Social Maturity Scale.**

The Vineland scale provides an outline of detailed performances in respect to which children show a progressive capacity for looking after themselves and for participating in those activities which lead toward ultimate independence as adults. The items of the scale are arranged in order of increaseing average difficulty, and represent progressive maturation in self help, self direction, locomotion, occupation, communication and social relations.

The underlying principles involved in the construction of the Vineland scale are much the same as those employed by Binet and Simon for their scale for measuring intelligence. Each item is conceived as representing a general growth in social responsibility which is expressed in some detailed performance as an overt expression of that responsibility.

The **Verbal Language Development Scale** is an extension of the communication portion of the Vineland scale. The items begin with infancy and go up to a young adult. Examples of some of the items are the following: produces consonant sounds reflexively, responds to name and no-no, comprehends bye-bye and pat-a-cake, follows simple instructions, marks with pencil or crayon, recognizes names of familiar objects, recognizes hair, mouth, ears, and hands when they are named, expressive vocabulary of at least 25 words, uses names of familiar objects, can name common pictures, verbalizes toilet needs, uses plurals, uses I, me, you etc. in his speech, says full name, says at least one nursery rhyme, names colors, reads by way of pictures, prints simple words, asks meaning of words, names penny, nickel, dime, and can tell a familiar story.

The **Preschool Attainment Record** is a supplement to the Vineland scale to give a more extensive inventory of specific attainments. The items are chronologically oriented by the following developmental areas: ambulation, manipulation, rapport, communication, responsibility, information, ideation, and creativity.

The PAR combines an assessment of physical, social and intellectual functions in a global appraisal of young children. This appraisal is conducted by means of both interview and observations which do not require immediate testing nor even the actual presence of the child under consideration. Interview data are obtained regarding the child's usual behavior, and this information is scored for normative age standing. The child's behavior may be observed on representative items if he is present or available.

The PAR follows the general design established by the Vineland Scale. It calls for a system of standardized interview reporting with an informant who is familiar with the child's usual behavior.

The PAR provides a record of performance which is a baseline for educational planning, treatment or management. It constitutes a home and school training schedule or a preschool curriculum. The aim of the PAR is to provide an assessment for children of preschool years with or without various types of handicaps.

Denver Developmental Screening Test

The **Denver Developmental Screening test (DDST)** is a standardized tool used to detect children with significant motor, social and/or language delays. The DDST uses a series of developmental tasks and milestones to ascertain whether a child's progress is within normal range. The test requires 10-20 minutes for administration and is designed for children varying in age from one month to six years. Validity studies showed that paraprofessionals using the DDST correctly identified abnormal children 92 percent of the time.

With proper training and proficiency evaluation, both professionals and paraprofessionals can learn to administer the DDST with a high degree of accuracy. Self instructional units for the DDST have been developed to insure the standardized method of test administration. Each unit consists of a classroom session, a practice testing session and a proficiency evaluation.

Some sample items are the following: plays pat-a-cake, uses a spoon, name pictures, throws ball overhand, recognizes colors, draws man, builds tower of blocks, separates from mom easily, etc.

Teacher Tests and Structured Interviews

There are two other techniques that can be used in the assessment of children that need to be mentioned, these are teacher made tests and structured interviews. Teacher tests have the following characteristics: administration of the tests is usually conducted by observing the skills and concepts exhibited as children engage in the program's activities, by asking questions, and by requesting demonstrations of skills and concepts. The content of each test covers one skill, or a group of related skills, and is administered for the purpose of assisting staff members in planning activities. Scoring of teacher constructed tests usually consists of checking the skills and concepts each child has mastered, or by reacting the level of mastery achieved.

Structured interviews are planned interactions with children. Interviews occur when a teacher or observer works directly with a child, presenting tasks and following a script to elicit behaviors of interest. Children's actions and responses are recorded as the interview progresses. A structured interview allows an observer/teacher to isolate a task and observe children's performance under common conditions. The tasks may not be ones that children would engage in spontaneously, or they may be behaviors for which observers/teachers want to probe additional responses.

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Chapter 3

Now that the more traditional known form of evaluation--the assessment of children has been dealt with let's turn our attention to the program. Program evaluation is the systematic gathering of information about operations and outcomes of early childhood and child care programs. The unit of evaluation is the program and not the individual child. Although as the reader will see later in this chapter, the assessment of children will play a critical role in certain types of evaluation. Program evaluation addresses questions such as whether there is a need for the program, whether the program is implemented as planned, is the program cost effective, and whether the program makes an impact on children's development. The information produced by program evaluations is exactly what is required to make effective management possible and to build community support for early childhood and child care programs.

All program evaluation can be divided into two general types, formative and summative. Formative evaluation is any systematic data gathering about the operations of an on going program for the purpose of providing feedback to the program staff to improve the program. It is often conducted by local or state personnel in the spirit of "How are we doing?" and "How can we do better?"

Summative evaluation is usually conducted at critical decision points for a program, such as when the program is under review for refunding. The purpose of summative evaluation is to obtain a measure of the overall worth of the program and the extent to which its outcomes satisfy its objectives.

Before dealing with the types of evaluation, a series of steps in an evaluative model is presented which takes chapter one and this chapter into account in attempting to generalize a process that can be used with either monitoring or evaluation.

The beginning point is the comprehensive program plan which was introduced in chapter one. The key element is to ask a specific evaluation question of the comprehensive program plan. What specifically in the program do you want to look at. This should be a very specific question and not a scatter gun approach. Once this is done then the gathering of information needs to occur in order to answer the evaluation question. This is a specific problem area as pointed out in chapter one--the collection of valid and reliable information. The remainder of this book is to alleviate this problem by giving the reader in chapter five several formative evaluation instruments that can be used to collect valid and reliable information about the program.

The next step is to analyze the results obtained from the formative evaluative instruments and to form judgements based on these results. You should be able to determine the strengths and weaknesses of the particular early childhood program at this point. Based on this a decision can be made to the necessary training and improvements to be made in the program in order to improve the quality of the early childhood program. This model has been operationalized with the National Academy of Early Childhood Program's Accreditation System.

Now let's turn our attention to the various types of program evaluation techniques that can be used in assessing an early childhood program.

Summative Evaluations

Management Evaluation

Management evaluation is the monitoring of program activities to ensure that they comply with regulations, follow established practices, and are managed efficiently. Licensing reviews and assessment of compliance with state child care regulations is a type of management evaluation. Chapters five and six deal with this type of management evaluation. Chapter five introduces an instrument based program monitoring system used to assess compliance with regulations or licensing systems in child care. Determining differential regulatory compliance through the use of indicator systems is managment evaluation at its best. Several studies that deal with regulatory indicator systems are presented in chapter six.

Cost Evaluation

The assessment of the program's effectiveness in terms of the outcomes per dollar spent is an example of cost evaluation. Cost effectiveness techniques are often used to estimate the cost per child served. These techniques are useful in identifying whether the program as a whole or some aspects of it cost more than they are worth and provide a basis for directors to make programs more cost efficient. Chapter six gives specific examples of cost evaluation studies. These studies used unit costs information and program quality formative evaluation instruments (these instruments are presented in chapter five).

Impact Evaluation

Impact evaluation is a form of summative evaluation measuring changes in children that could be attributed to program participation. To be valid, impact evaluations usually require large samples, control groups, and sophisticated data analysis strategies. Outside funding and technical consultants are also necessary. A local program may be one of several programs included in an impact evaluation. Chapter six presents several examples of this type of evaluation that were completed internationally. These five studies in Chicago, Los Angeles, Pennsylvania, Bermuda, and Victoria, Canada are the latest in a series of impact evaluation studies completed in three waves over the past twenty years. These studies have attempted to answer several key issues in the child care/early childhood field.

Formative Evaluations

Needs Evaluation/Assessment and Program Analysis

Needs assessment is the gathering of information about the demand for program services. It may include estimation of the number of children needing care, pattern of days and hours for which care is needed, and any special conditions required for care. Needs assessment is usually required in applications for grants to fund special projects. Decisions about program start up and operating parameters are often made based on needs assessment findings. Good examples of this type of evaluation is at the state level in determining resource allocation or with resource and referral programs.

Program analysis is the assessment of the extent to which programs are carried out as designed. For most local and state programs this is the heart of program evaluation. It is a formative evaluation activity that is well within the capabilities of local and state personnel and one that has the potential to provide valuable information regarding daily operation. It typically involves careful observation of staff behavior, analyses of curriculum activities, and assessment of the appropriateness of materials and equipment. The result of program analysis is the identification of aspects of program operation that may be discrepant from the intentions of the overall program design. Feedback to the program director allows intervention through staff training and supervision to fine tune activities to match program goals. The problem with program analysis has been the standard application of tools or instruments in the actual analysis of program opertions. Chapter five alleviates this problem by presenting several assessment tools as well as the National Academy of Early Childhood Program's Accreditation System. The Accreditation system is probably the best example of program analysis and is a highly recommended practice for early childhood and child care programs to pursue.

General Characteristics of Evaluation

The basic tools of program evaluation apply to any program regardless of developmental viewpoint or philosophy as stated in the comprehensive program plan. The fundamental program evaluation questions remain the same: Who does the program serve? How well is the program implemented? How efficient is the program? and What are its effects?

Evaluation is an important part of managing programs. Evaluation offers child care programs a way to judge how well they are doing. Generally, evaluations have two components: information which may be numerical or qualitative, and judgement which involves first deciding what to evaluate and then determining how to interpret and use the collected information.

The two broad categories of evalution are assessment of children and program evaluation as stated in chapter two and this chapter. The first category evaluates the behavior and progress of children in a child care program. These assessments are done to describe children's abilities to parents and sponsors and to diagnose children's needs so that future activities can be planned. Techniques for child assessment included: anecdotal records, checklists, rating scales, standardized and teacher made tests, and structured interviews. Techniques assessing children against age related norms are called norm referenced; those tools assessing children's progress toward certain goals are called criterion referenced. For a further discussion of these issues and the interrelationship of the above to other curriculum and comprehensive plan tie ins see Seaver and Cartwright's **Child Care Administration.**

Program evaluation looks at the whole program, judging whether the program is working as planned and whether it is contributing to children's development. The two general kinds of program evaluation are formative and summative. Formative evaluation is the collection of data about ongoing operations for the sake of immediate feedback. Summative evaluation which is often conducted by external observers measures a program's overall worth over a period of time. Within these general kinds, the distinctive types of evaluation include: management, cost, impact, needs and program analysis.

The next topic that needs clarification are the differences between programmonitoring/analysis or implementation and programevaluation. Chapter four deals with these distinctions.

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Chapter 4

Chapter three provided an overview to program evaluation giving examples of summative and formative evaluation types. This chapter gives greater detail to the distinctions between program evaluation (summative) and program monitoring (formative). Conceptual differences are addressed as well as specific design elements which will help to build an assessment and measurement paradigm later in this chapter.

As indicated in chapter three program analysis and monitoring will be emphasized in the remainder of this textbook. The reason for doing this is that many of the issues involving the more traditional program evaluation techniques have been addressed in several other texts. What is lacking in that presentaion is an approach for assessing and measuring program implementation. In order to address this issue the key distinctions regarding program monitoring and systems elements must be articulated. Once that has been presented than demonstrating the need for data utilization of program monitoring systems through data integration and reduction will be presented in the last section in this chapter and chapter five will give measurement considerations and examples.

Monitoring of Child Care Programs

This section addresses key program monitoring concepts from a state level perspective. The reason for this perspective is that the federal government over the past several years has transferred many of their monitoring and evaluative duties to the state level. Based on this the state drives many of the decisions at the local level. A perfect example of this is from chapter one with the comprehensive program plan where many of the components of the plan are either directly or indirectly influenced by the state either from a licensing perspective or funding agency perspective.

Monitoring of child care is conducted within an established environment of some public agency dealing with independent organizations. These monitored child care organizations may be operated under governmental, voluntary, or proprietary auspices.

The range of activities related to child care that may be considered to be monitoring varies considerably from state to state. Typically, however, there are two levels of child care monitoring in which states are involved: 1) monitoring to ensure compliance with state licensing statutes which apply to all providers and 2) monitoring to ensure compliance with departmental regulations which apply only to publicly funded providers. In the latter case, regulations usually relate to program and contracting requirements which are over and above the "floor" provided by the licensing standards. As a subsequent section of this chapter describes, however, the terms used for these two levels are not consistent.

States with a strong regulatory stance limit their monitoring of non publicly funded providers to basic requirements concerning the health and safety of young children. This type of monitoring involves a state principally as regulator, with responsibility for seting standards and enforcing compliance.

Some states view their role more broadly by taking a further step beyond the licensing level to assist those child care providers who do not meet the standards at either the application point or at later inspection visits to come into compliance. This technical assistance is intended to encourage the general improvement of child care in the state. A slightly different expansion in the scope of state involvement occurs when a state determines that it has a role in strengthening child care programs beyond the minimum level of its licensing standards. When this occurs a better balance between licensing and accreditation systems can be attained which more clearly establishes an overall quality assurance system consisting of representative quality assurance regulations (licensing) and quality assurance enhancements (accreditation).

Wide differences exist in the terms that states apply to their monitoring activities. The term monitoring itself may be more or less strictly construed to apply to the supervision phase of the licensing process, the contract compliance process, technical assistance to providers, or other activities such as methods used to manage state resources for monitoring. The following list gives the wide variety of activities employed under the guides of monitoring: licensing, registration, approval, regulation, establishment of recommended guidelines, technical assistance, training, corrective action, contracting, reporting, auditing, and evaluation.

Another issue arises in the legal basis for monitoring activities. In all states, licensing standards that apply to all providers regardless of funding are specified in statute; in some states, additional standards or requirements are applied to publicly funded child care through the administrative regulatory process.

Therefore, for the purposes of this college text book, monitoring is defined as: the management process of reviewing and controlling the delivery of child care/early childhood program services on an ongoing basis, according to predetermined criteria, with the intention of taking corrective action to assure and increase both program quality and management efficiency.

Monitoring and Evaluation

Several key phrases in the definition are highlighted to clarify the usefulness of the definition. The first of these are management process and ongoing basis which emphasize the continuing and dynamic aspects of monitoring and help to distinguish monitoring from program evaluation. Monitoring actively seeks to intervene in ongoing systems on a regular, periodic basis for the purpose of making changes and improvements.

Monitoring may be viewed separately from the service delivery system being monitored. In general terms, the monitoring process consists of the following: setting criteris (e.g. standards or administrative requirements), conducting the analysis, reviewing, and reiterating this process.

Monitoring is linked to the continuous, ongoing, changing activities of the service delivery system being monitored by performing the following functions: agreeing on criteria, assessing conformance, appraising feedback, and taking corrective action.

By comparison program evaluation does not intervene in the system except to clairfy the goals and objectives against which activities will be appraised. Thus, program evaluation first helps managers of child care service delivery to clarify goals and objectives of services. At some defined subsequent time, the program evaluator gathers data to test whether the child care delivery system is producing the desired results.

Systems Elements

Another way of viewing monitoring as a management process is to look at it in terms of system elements in which the service delivery system is broken into the following system elements: resource inputs, service process, service outputs, and outcomes.

Within these four elements monitoring is viewed as the ongoing analysis of inputs, process, and outputs of the system. Program evaluation looks at outcomes as compared to inputs, process, and outputs.

An interesting perspective is that the analysis of inputs and process is best conceived of as quality assessment. For example, the ratio of number of staff to children is best viewed as a quality indicator as it can be compared with national and state standards. However, this standard does not measure output nor, except in limited instances, is it linked empirically to outcomes. In this example, adequate staff/child ratios do not necessarily ensure the outcome of positive child development in the children cared for (management vs impact evaluation).

Another management consideration is in the analytic focus which relates outputs and inputs to develop efficiency measures. For example, the cumulative total number of days of care provided by all staff provides an efficiency measure but is not empirically linked to outcome.

The comparison of inputs and processes to outcomes which comprises impact evaluation is generally the analytic level at which evaluation operates. For example, Pennsylvania uses an instrument (the **Child Development Program Evaluation (CDPE)**--see chapter 5) for monitoring all child care providers that includes such items as: child development curriculum, nutrition, health and safety, administration, social services, transportation, financial and other record keeping requirements. These items help to focus on the quality, efficiency, and regulatory compliance of the child care services provided. Clearly, the monitor who performs a review using the CDPE is also concerned that the child's development and health are being enhanced and that the child is in a safe environment. However, the monitor's role stops short of attempting to measure the extent of child satisfaction, the program's contribution to the children's health, or to the degree of child development that has occurred. The measurement of these factors and their relationship to the resources used and services provided would fall within the realm of impact evaluation as versus program analysis.

Another key phrase in the definition is reviewing and controlling. This phrase highlights the management control focus of monitoring. Monitoring does not include the organization of service delivery, the installation of management systems to support service delivery. All of these aspects of management may be tested by the monitor; however, the objective of monitoring is to assess whether these management systems are functioning well or poorly according to predetermined criteria and to take steps to correct any deficiences that may be observed.

The third key phrase is assuring and increasing program quality and management efficiency. Program quality is defined at whatever level a state finds acceptable and has incorporated into its licensing standards and its regulations. This term could include basic health and safety or enrichment or good management by the provider which leads to higher quality services to children. The monitoring role is not simply one of enforcement of standards as would be true in the licensing function but encompasses active support of improvement in the child care programs that are monitored. The monitor plays a supportive role and works with the child care providers to develop a strong early childhood/child service delivery system. The emphasis is on the quality of the early childhood services provided and the resulting benefits to the children served.

The final key phrase is predetermined criteria. The control criteria that are applied must be established as the first step in the monitoring process, and these criteria must have the acceptance of the child care provider. Ideally, child care service providers will have been involved in their development and implementation, and the criteria will reflect the most current accepted research and thinking in the early childhood/child care field. Finally, the criteria should impose the least constraints on the service provider consistent with the objective of meeting designated levels of quality services provided.

Monitoring is a program analytic/formative evaluative/program implementation assessment process. Now that the distinctions have been drawn between program monitoring and program evaluation, it is necessary to turn our attention to the measurement systems that are used at the state level to assess the various monitoring (program analysis) and evaluative (impact, cost, management, needs) functions.

System Integration

The prior section delineated the differences between program evaluation and program monitoring systems highlighting the system elements. This section integrates these system elements with the types of evaluation presented in chapter three through the development and presentation of how information is collected through a systems assessment paradigm.

The basic linkages can be made between inputs and cost evaluation which are measured by fiscal reporting systems. Outputs are addressed in needs assessments which are measured by statistical reporting systems such as eligibility, attendance, enrollment type systems. Processes are addressed in management evaluations or program analyses. These are measured through program compliance, licensing or accreditation systems. Outcomes are generally addressed through impact evaluations which is a combination of program, statistical and fiscal systems in some combination. When this occurs cost benefit, and cost effectiveness analyses can be performed. However this rarely happens because of the underutilization of program monitoring systems. The remainder of this section addresses this issue.

Systems Assessment, Data Reduction & Utilization

The past twenty years have seen a gradual but nonetheless dramatic transition in the public administration of child care delivery systems. The 1960's and 1970's were a period of tremendous growth with fiscal restraints through the use of resource allocation formulae practically non existent. The major purpose of state public administrators was to act as conduits for federal dollars that were to get to the local level as broadly and as quickly as possible.

A sudden change began to occur in the mid 1970's when the amount of money available from the federal level started to level off and it became more difficult for state public administrators to continue to meet local needs effectively. By the late 1970's and into the early 1980's the change was complete and resource allocation decisions became more and more difficult and increasingly complex.

States were ill equipped to handle these resource allocation decisions until they could develop more effective and efficient monitoring, evaluation, and information systems. The public administration of child care found itself in the position of attempting to make resource allocation decisions on the basis of fragmented data systems that were under utilized and did not provide entirely accurate information. There developed a tremendous need to better utilize existing data systems at the statewide level (Federal government shifted most monitoring and evaluation responsibility from their level to the state level) through data integration (becoming more effective) and data reduction (becoming more efficient). The major obstacle appeared to be a failure to integrate financial management needs of decision makers with statewide monitoring, evaluation, and information systems.

There have been two major reviews of the literature in attempting to identify exemplary and innovative monitoring, evaluative and information systems that dealt with the public administration of child care services. From this review, several systems began to emerge as innovative and on the cutting edge of integrating data from fiscal, statistical, and program sources and reducing these data into a series of indicators. These systems also had the capability to do ongoing program analyses, management and cost evaluations and even in some cases to do impact evaluations. On a particular systems approach, the **Child Development Program Evaluation**--an instrument based program monitoring and indicator system for child care (see chapter 5 for a description of this system and chapter 6 for results from cost, impact and management evaluations), has been described as a continuous monitoring information system with an evaluative component. This system shows great promise of being a potential solution to the resource allocation problem in the public administration of child care because of its data integration and data reduction features that involve programmatic, statistical and fiscal monitoring and information systems for decision support.

There are three major issues that need to be addressed in describing this assessment systems approach: one, data integration; two, data reduction; three, data utilization.

How do state public administrative agencies measure on going activities and procedures of child care programs? Generally, state agencies develop three types of information/monitoring systems: 1) fiscal systems that keep track of budget, encumbrances and actual expenditures; 2) statistical reporting systems keep track of clients, that the particular state agency services, by demographic characteristics: such as race, sex, marital status of family, number of individuals in the family, family income, actual services provided, and eligibility status; and 3) program compliance systems that assess the site, agency, or program and attempt to measure compliance with state and/or federal regulations that ensure the health, safety of children and the quality of services provided to children.

In many states these systems have been operated in very separate and distinct ways without a great deal of communication across the various monitoring and information systems. In those unique cases where a state office does manage more than one monitoring and information system, generally these included the fiscal and statistical reporting systems. These systems are used because of their quantifiable nature and somewhat ease of collecting data.

It is unusual to find program compliance systems communicating with either fiscal or statistical reporting systems. When cost evaluations are done, either the fiscal system is used alone or the statistical reporting system is used alone and in very rare cases are they used in conjuction with each other.

It is unfortunate that state agencies have not taken advantage of an existing resource by integrating data from the statistical reporting and fiscal systems. The technology exists and the evaluative methodologies warrant doing it.

However, the status of program compliance monitoring systems is even more serious. This system usually tracks program implementation and can be used for program analysis and management evaluation. In many states there is the inability to quantify this system because of poorly written, ambiguous regulations and program objectives. Because of the program compliance monitoring systems being insufficient, states have a very incomplete data set and overall monitoring system in order to do any meaningful types of evaluations.

It is possible to better develop the program compliance system so that program implementation can be measured and then included in cost and impact evaluations. The next section and chapter five present some basic considerations of measuring (collecting valid and reliable information) program implementation and examples of formative evaluative instruments to be used in measuring program implementation.

Measuring Program Implementaion

The previous section presented some of the inherent problems in doing meaningful evaluations that involved a program monitoring system. This section focuses on the program monitoring system as it relates to measuring or assessing program implementation in a program analytical framework. The basic parameters of assessment are addressed in this section while chapter five gives specific examples of formative evaluative/program monitoring instruments and systems that have been developed and can be used to measure program implementation.

There are three basic levels of measurement of program implementation: records, observations, and interviews. Each level has its particular characteristics and strengths and weaknesses.

Records are systematic accounts of regular occurrences in an early childhood and child care program. Attendance and enrollment reports for children, sign in sheets, permission slips, immunization records, child and staff records, teacher logs, and individual child assessments are all examples of record keeping functions.

Observations are either formal or informal, structured or unstructured in format. They can take the form of anecdotal recordings, checklists, rating scales, standardized tests, or teacher made tests for children (see chapter 2 for details) or they can be program wide checklists and rating scales (see chapter 5 for details).

Interviews can be face to face interactions between staff and parents or questionnaires that can be mailed from the program to parents. The advantage of the interview approach is in its flexibility. The advantage of the questionnaire approach is that it can be answered anonymously, and many people at many sites can be involved. The disadvantages of interviews is that they are time consuming and the interviewer could potentially influence the responses. The disadvantages of the questionnaire approach is that there is little flexibility that one finds in the interview and there is the problem of getting the questionnaires returned.

The advantages of records is that they are an objective source of information and they record events at the time of occurrence. The disadvantages of records is they are time consuming, can be incomplete, there may be problems of confidentiality and they can be burdensome for providers of service to maintain.

The advantages of observations is that they provide a different point of view and can be highly credible if completed by a third party. The disadvantages of observations is the presence of the observers in the classroom or center, the time needed to develop the observation instruments, the training of the individuals who must administer the observation tools, and the amount of time to actually do the observations.

For additional resources and information regarding the measurement of program implementation and other key concepts in program evaluation techniques, an excellent resource series is the **Program Evaluation Kit,** edited by Morris from the Center for the Study of Evaluation, University of California at Los Angeles, published by Sage Publications.

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Chapter 5

This chapter details the state of the art in formative evaluative/program analysis instruments and systems. The development of the instruments/systems in this chapter is a relatively new phenomenon. The systems highlighted are drawn from two sources. One of these is the Decker and Decker text which has been referenced before in chapter one. In this text, four systems and instruments are introduced. This chapter explores in greater detail those four systems. The interested reader should consult the **Decker Text** to see how program evaluation fits into the overall scheme of early childhood education programs.

The other source is a review by the **Human Services Research Institute of Unpublished Systems and Instruments** used for the assessment and enhancement of program quality in human service programs and a review by the **Social Service Research Institute of State Program Monitoring Systems.**

The four systems to be addressed are by authors who are leading child care/early childhood evaluators and researchers. Their work spans decades in the development and implementation of instrument design, monitoring and evaluation systems. All four system do share a common theoretical framework in ecological theory. All four systems and instruments evaluate the early childhood environment in one fashion or another.

The Major Evaluation and Monitoring System

The four instruments and systems are the following: **Day's Early Childhood Education: An ecological Approach systems, Prescott's Day Care Environment Inventory, Harms and Clifford's Early Childhood Environment Rating Scale, and Fiene's Child Development Program Evaluation System.** These four systems and instruments have been used in summative research studies that assessed the relative impact on children's development--these impact evaluation studies are addressed in chapter six. These four systems have been and probably have their greatest potential as program analysis and monitoring assessment tools. Within the context of ongoing evaluation of a formative type will these instruments achieve their true potential. They form a solid base for gathering valid and reliable information on an ongoing basis regarding the operation of child care programs which can then be used in an evaluative mode.

All of the systems and instruments in this chapter should have the following characteristics and objectives for implementation.

The system should ensure equitable, enforceable monitoring of child care to meet a desired level of child health and safety and improve program quality. They should ensure that child care promotes child development. They should provide for efficient and cost effective funding and monitoring procedures and permit sound policy decision making.

All the systems are quantitative and objective, easily administered and consistent, supportive of providers, focus on results, based on state of the art child development research, and are easy to modify and improve.

Some of the results from these systems which will be described in greater detail in chapter 6 that deals with summative evaluations are the following: the systems should promote improved child care program performance, improved regulatory and program quality balance and climate, improved information for policy and financial decisions, and cost reductions in the monitoring effort.

Fiene's Child Development Program Evaluation System

The first system to be described is the Child Development Program Evalution System (CDPE) developed by Dr. Richard Fiene and several colleagues. The CDPE system was originally conceived through the unity of two pilot systems--the Ecological Monitoring Information System (EMIS) designed by Fiene and the Health Advocacy Training System (HSCC) developed by Dr. Susan Aronson at the Medical College of Pennsylvania. Both of these pilot systems were developed and implemented in the early to mid 1970's.

The HSCC system addressed the key health, nutrition and environmental safety components of an early childhood program. It was specifically designed to improve these components through a process of monitoring compliance with standards followed by intensive training sessions.

The EMIS system addressed the key child development, social service and administration components of an early childhood program. It was specifically designed to improve the above components in Appalachian Regional Commission child development programs.

It was clearly evident to both Fiene and Aronson that combining their respective instruments and systems would make for a very comprehensive approach to the evaluation and monitoring of early childhood and child care programs.

The EMIS and HSCC systems were merged and the resulting CDPE system was created. The CDPE system measures seven major component areas: child care administration, environmental safety, child development program, health, nutrition, social services and transportation. Within each of these major components there are specific regulatory sections, such as: staffing requirements, employee records, child records, building and site. The CDPE system has instruments for day care and early childhood programs group day care homes, and family day care homes.

The CDPE system and its program compliance system revolves around the instruments for day care centers, family day care and group day care homes. The CDPE system also has a fiscal and statistical sub systems that can be used to complete cost, management and impact evaluative analyses.

A unique feature of the CDPE system is that the center based instrument's items are all weighted in terms of the relative risk that a child is placed in if there is non compliance with that particular item.

More specifically the CDPE system has the following general areas and specific items in each area.

General requirements which includes relevant approvals from the Health Department, Labor and Industry, Sanitation, etc. Insurance coverage, parent participation procedures, child abuse reporting procedures, and provision for special services.

The items included in each of the general areas are only a sampling of the population of items in the CDPE. There are over 270 discrete items in the CDPE instrument but for purposes of this book only certain items will be highlighted to give the reader a flavor for the content of each general area. The interested reader should consult the listing of further readings at the end of this book for more detailed references regarding the CDPE system.

Staffing standards which includes qualifications of staff, responsibilities of staff, adult child ratio and minimum staff requirements, and staff health requirements. Employee records which includes evidence of qualifications and references for staff.

Building and site which included appropriate indoor and outdoor square footage per child, characteristics of play areas, sanitary facilities, storage of medicine and materials, cleanliness, screening of windows and doors, heating apparatus, and education materials available. Equipment includes the condition and placement of equipment, swimming regulations, and napping rules.

Program for children includes evidence of written program plan with developmental activities, discipline methods and procedures, identification and referral of special needs children, sanitary habits developed, infant and toddler stimulation, and school age requirements.

Food and nutrition includes menu requirements, infant formula rules, utensils, and special diet considerations.

Transportation includes vehicles all licensed and inspected, insurance coverage, adult child ratios, restraint of children, and first aid kit materials.

Child health includes requirements of health records, emergency contact information, medical emergency procedues, medications, procedure for ill children, and first aid requirements. Staff health includes procedures for staff illness, and physical requirements for infant caregivers.

Procedures and applications include pre admission policy, requirements for child's application, and requirements of day care agreement between parent and provider.

Child records includes frequency of updating records, confidentiality of record content, information to be included in child's records, parental rights to records, procedure for release of information, and the use of records after termination of service.

The CDPE system is a very comprehensive system of evaluating a child care/early childhood program. The important concept to keep in mind is that it is a quality assurance regulatory system that focuses on the licensing level. The other systems that are presented in this chapter are all quality assurance enhancement systems--these types of systems focus on program quality components that are above and beyond the licensing level. The CDPE system does dovetail nicely with several of the other systems in this chapter as well as overlapping significantly with the National Academy of Early Childhood Program's Accreditation System. All of the systems in this chapter overlap with the NAEYC accreditation system in one fashion or another.

In completing a review to determine the overlap in the accreditation system and the CDPE system the following findings were uncovered.

Program for Children--

Both sets of standards are weak in programs for infants and toddlers.

CDPE standards are weak in assessing the quality of interactions between staff and children, handling of transitional times for children, and in requiring a comprehensive program plan.

CDPE and NAEYC standards overlap significantly in written daily program plan for children and the content of the daily program plan; no physical punishment is allowed; early identification of developmental delays; and children have the opportunity to go outdoors, weather permitting.

Health, Safety, Nutrition, and Physical Environment--

There is substantial overlap between both sets of standards with the following items that are not in the CDPE standards: there is no statement about activity areas being defined where children can work alone or in groups; individual spaces for children to hang and store personal belongings; sound absorbing materials are used; sides of cribs locked in position when occupied; electric outlets capped; floor coverings are non slip/ staff familiar with emergency procedures; operation of fire extinguisher; procedures for severe storms; respect for ethnic diversity in meal planning; uses US Dept of Agriculture Child Care Food standards; modeling of good eating habits in terms of social interaction.

Administration-

There is generally substantial overlap between both sets of standards where the CDPE standards establish a very basic level that the NAEYC standards build upon.

CDPE standards do not have the following: does not require annual planning; no written policies in child illnesses, holidays, or refunds; no written personnel policies; no policies on staff benefits requirements; no written policies defining roles and responsibilities of board and staff; no requirement for budget planning; staff provided break time.

Staffing--

Staff child ratios are required by both sets of standards.

CDPE standards to not have group size requirement.

CDPE standards have few references to the level of interactions between staff and children.

Parent Staff Communication--

There is overlap between the two sets of standards but the CDPE standards provide a very basic level of parental involvement. NAEYC standards elaborate on the basic standards.

The CDPE standards do not have any reference to center evaluations by parents.

The CDPE system has three distinguishing characteristics: First, it is instrument based. The system uses checklists that contain highly specific questions. These questions correspond directly to the state's regulations or other requirements. Second, it supports program monitoring as defined in chapter four. Third, CDPE is a comprehensive system. It is part of a group of related steps such as on site reviews, coorective action, follow up reviews, and summarizing and reporting results that are used recurrently to accomplish the task of compliance monitoring. Program, fiscal, and statistical systems can be linked quantitatively to constitute a comprehensive monitoring system for child care as outlined in chapter four.

Because of the comprehensive nature of the CDPE system there was a need in the development of this system to design an indicator systems approach. Simply defined, an indicator system is a checklist that contains selected items or indicators from the longer comprehensive CDPE instrument.

The items on the indicator checklist are those that have been determined to be most effective in discriminating between child care providers that typically receive high overall scores on the Comprehensive CDPE or provide a high level of quality care and child care providers that typically receive low overall scores or provide low level of care.

Because of their value in distinguishing between child care providers who are in compliance and those that are out of compliance, the items on the indicator checklist have been called predictor items. That is, they are a subset of items from the longer CDPE instrument that have a strong ability to predict the results that would have been obtained had the comprehensive CDPE instrument been administered to a given child care provider.

CDPE type indicator systems have been developed and implemented in several states and the following items represent a generic indicator checklist for child care monitoring:

Director Qualification
Health Appraisal
Supervision of Children
Adult Child Ratios
Sufficient Space
Emergency Contact Information
Hazard Free Environment
Toxic Materials Inaccessible
Equipment Not Hazardous
Nutrition
Medication
Safety Carrier
Program Observation

These predictor items are at the licensing or quality assurance regulatory level, and have been found to be consistently significant predictors. They are comprehensive in that significant items were found in a wide range of areas of a child care program. The selected items also appear to have high face validity when compared to the National Association for the Education of Young Children's Accreditation Criteria.

Reliability and validity testing has been done on the CDPE system. Studies of reliability have found the CDPE to have high interrater reliability (r = .85+) on specific items, Cronbach alpha's for the component sub scales that were highly reliable especially the health, safety and program for children components. Also construct and content validity have been determined using independent and expert observers.

The other featues of the CDPE system dealing with the indicator systems approach and the weighting systems approach have both been documented as highly reliable and valid approaches and have been transferred to several states and other human services other than child care and early childhood education. Both approaches have been independently evaluated to determine the effectiveness and efficiency of these approaches to the monitoring and evaluation of programs.

Harms and Clifford Early Childhood Environment Rating Scale

The Early Childhood Environment Rating Scale (ECERS) is probably the most well known of the quality assurance enhancement instruments. It has been used in many impact evaluation studies, management and cost evaluations. It has been used along with the CDPE system in policy research.

The ECERS gives an overall picture of the surroundings that have been created for the children and adults who share an early childhood setting.

Environment, as defined in this scale, includes: use of space, materials and experiences to enhance children's development, daily schedule, and supervision provided.

There are seven areas covered in separate subscales as part of the ECERS.

Personal care routines of children: all routines associated with the comfort, health, and well being of the children: for example, dispering, rest, and meals.

Furnishings and display for children: making available, taking care of, arranging, and using regularly with children the furniture, storage shelves, and display space necessary to provide personal care and an educational program.

Language reasoning experiences: use of materials, activities. and teaching interactions to help children learn to communicate in words and to use relationships basic to thought, such as size relationships, cause and effect, steps in a sequence, and time relationships.

Fine and gross motor activities: fine motor activities exercise the fine or small muscles, such as the muscles of the hand in drawing, cutting with scissors, or picking up a small object. Since the coordination of the eye and the hand are usually needed for fine motor work, these activities are sometimes called perceptual fine motor activities. Gross motor activities exercise the gross or larger muscles, such as the muscles of the legs used in climbing and running or the muscles of the arms used in swinging.

Creative activities: activities and materials, such as those used in art, block building, and dramatic play, are flexible, open ended, do not have one right answer, and allow for a wide variety of constructive uses. Creative activities reflect the abilities and interests of children.

Social development: guiding the children's development of a good image of themselves and others and helping them to establish interaction skills.

Adult needs: providing space and equipment for the key adults in the early childhood setting--the teachers and parents. Staff members have both personal comfort needs and professional needs for meeting their requirements in the teaching role. Parents have personal needs for reassurance and inclusion, as well as information and skill development needs to help them in their parenting role.

The ECERS covers the basic aspects of all early childhood facilities and can be used in day care facilities, Head Start programs, parent coopertive preschools private preschool programs, playgroups, church related preschools, and kindergarten programs.

The ECERS can be used by people playing various roles related to early childhood settings. It can be used by classroom teachers, directors or principals, board members, and outside professionals, such as evaluation teams, trainers, and state licensing staff, to provide a basis for evaluation and planning.

Within a facility each classroom teacher and her or his assistants can use the scale to obtain a more objective picture of how well their own room is doing. The director or principal of a facility can use the ECERS to organize her or his impressions of each room in the facility after careful observations in each room. Evaluation teams, such as those required by Head Start programs, can use the ECERS to assess each classroom, because little training is required to the ECERS.

Trainers, such as community college instructors and Title XX project staff, can use the ECERS as part of their training courses. They can ask teachers to use the ECERS in their own classrooms and report in class. If on site supervision is provided as part of the course work, the trainers can use the ECERS themselves in the classroom to determine training needs or to measure improvements after training.

State licensing staff can use the ECERS to evaluate classrooms. If the classroom teachers and the director also complete the ECERS, the licensing staff member will find that this common basis for evaluation facilitates identification of areas needing improvement. This has occurred in Pennsylvania where licensing staff used the CDPE indicator system and the ECERS in tandem to do evaluations of early childhood/child care programs that were part of an impact evaluation (see chapter 6 for further details of this research study). This particular approach of using a Quality assurance regulatory system (CDPE) and a Quality assurance enhancement system (ECERS) is a highly efficient and effective monitoring system.

The ECERS also as the CDPE did has a high overlap with the NAEYC accreditation system especially in the early childhood observations section of the accreditation system.

The studies of validity and reliability have been very significant in the use of the ECERS. Just as has been done with the CDPE, interrater reliability by classroom, interrater reliability by item, and internal consistency measures have been used.

Under development are ECERS related scales for family day care homes and infant toddler programs.

Day's Early Childhood Education: An Ecological Approach

This system is part of a comprehensive approach to early childhood education based upon ecological psychology. It employs human ecological theory and principles to improve the quality of group care and early education. The human ecological perspective is drawn from the theories and research of Lewin, Barker, Gump and Bronfenbrenner. The approach is based on an interactive psychology which assumes that development and learning are a function of the mutual effects of the person on his/her environment and of the environment on the person.

Organizationally the particular approach addresses the following issues.

Human ecology and early childhood education: ecological systems defined, characteristics of ecological systems, the behavior setting, children's behavior in early education settings, and the value of the ecological perspective.

Intra-individual differences and program development: intra-individual variability, personality characteristics and behavior settings, alternative behavior modes, behavior mode and behavior setting, program support for behavior variablity, social contact, type of direction, modes of learning, short term and sustained inquiry, and individual differences among children.

The physical setting and utilization of space: environmental factors in program development, physical setting, open versus closed space, the selection of learning areas, the organization of learning areas, and supporting children's behavior.

The selection, presentation, and use of materials: the availability ofmaterials, and the role of adults in materials use.

Adult child interaction: teachers roles and children's behavior, the interactive influence of teachers, adults as managers and teachers, teaching role, close, reliable and purposive teaching.

Based upon the above general organizational overview, a teacher or evaluator can then ask many specific questions based on this ecological approach. Dr. Day has several assessment guides that have been developed to evaluate the specific characteristics of early childhood programs based upon the ecological perspective. These assessment guides are presented here through the use of a question format for the above three areas.

The first assessment guide as outlined by Day is the Physical Setting and Space Utilization Assessment Guide. This guide presented in question format follows:

Physical Setting and Space Utilization--

Is the ratio of closed-to open- space areas appropriate for the activities, the goals of the program, and the development of the children?

Has the classroom been arranged so that protected areas exist?

Is there any contradiction between activity and type of space?

Does the arrangement tend itself to a variety of groupings--total or large group, small group, individual?

Are the boundaries for these different areas clearly defined?

Is there a place where one or two children can be alone and separated from all other activity?

Is this private space visually separated from other areas?

Does the selection of learning areas support the goals of the program?

Do the areas support alternative forms of social contact, activity involvement, and modes of inquiry?

Are the children using each area as they were intended to be used?

Do Children distribute themselves throughtout the areas?

Can children move easily from area to area?

Do the total physical space arrangement and specific learning areas lend themselves to long-term variety?

Can the space be reorganized to meet different goals or rearranged in ways to provide variety and stimulate new activity?

Does the arrangement encourage and support the use or combining of materials from adjacent areas?

Would the number of children in an area cause problems for children engaged in activities in adjacent areas?

Are learning areas clearly separated?

Are there too few or too many learning areas?

Is there too much unoccupied space?

Are children having difficulty moving from one area to another because of congestion?

This concludes the questions related to the Physical setting and space utilization assessment guide.

Use of Materials--

Is there a clear relationship between the purposes and goals of the program and the activities likely to be provoked by the materials of each area?

Are the materials appropriate for the developmental level of the children?

Is there variety when that is important?

Do the materials offer both single and multiple actions by the childen?

Are the materials displayed on open shelves?

Are the materials easily seen and within reach of the smallest child?

Are the materials that are stored, easily taken from the storage area; presented in a clear, unconfusing way? or, are they stacked one on the other, crammed close by other materials; do they require searching for before they can be used?

Do the materials in each area support the purposes and anticipated behaviors of the area?

Could the materials in each area be usefully continued with those in adjacent areas?

Are the materials organized in each area in a way that would draw children to use them?

Are the materials easily available to the children when they choose to use them?

How much do the adults support and encourage children's use of the materials?

Do adults engage cooperatively with the children in using the materials?

Do adults assist children in learning to use some materials, complete tasks, or make combinations?

Are adults willing to spend time engaged with children in exploring ways in which materials may be used?

Can adults observe the interaction of the child and enter an activity as participant or demonstrator when necessary to sustain activity.?

Can adults leave an activity when the children have gained control of the materials and the vents?

Is there a variety of materials to support the range of children's behaviors?

Are materials in each area changed from time to time as children lose interest in their use?

Can changes be made without modifying the intent and purpose of the area?

Are areas changed-removed, substituted-when it seems developmentally necessary?

This concludes the Materials Assessment questions.

Adult Child Interaction--

To what degree have plans and arrangements for the children's program been made in advance?

Are staff busy preparing areas and readying activities while children are present, or has most of this been completed before their arrival?

Have the learning areas and activities been carefully organized, provided with the appropriate materials, and arranged in a way supportive of their purpose?

Are adults spending their time on children's acitivity-observing, participating, making suggestions, teaching? Or are they leaving children on their own? Or are teachers directing children most of the time?

Do teachers seem to know what is expected of them and how they should play their role in each activity and learning area?

Are teachers aware of the activities of children who are not interacting with adults?

Is there a sense that adults are in charge of the situation even when they are not directing all children's behavior?

Are the adults physically near children?

Do adults participate easily in the events of the day?

Do adults invite children to assist them in their tasks?

Do adults respond with patience and warmth to children's inquiries? Do adults try to engage children in conversation about what the children are doing?

Is adult behavior fairly stable?

Can children predict how adults will react to most situations?

Are adults evenhanded in their reaction to children's out-of-bounds behavior?

Does adult behavior flow naturally from the activity or learning area?

Are adults caught up in the event of the day, or do they seem to be occupied by yesterday or tommorrow?.

Do adults respond to children's expressions of need with concern and attention?

Are adults able to collaborate with children on activities selected and structured by the children?

Do adults seem to consider their actions prior to involvement, or are they impulsive?

Do children seek out or avoid adult contact?

This concludes the adult child interaction assessment guide question format.

This concludes Day's Early Childhood Education: An Ecological Approach. The next major instrument and system to be reviewed has many similar characteristics both conceptually and theoretically.

Prescott's Day Care Environmental Inventory

Dr. Prescott has developed one of the longest lasting quality assurance enhancement instruments in the early childhood field, the Day Care Environment Inventory (DCEI). The DCEI has been used in several impact and cost evaluations which are described in chapter 6.

The DCEI is based on the following assumptions and theoretical orientation: that there are marked differences in children's individual style of approach to a given milieu, stemming from temperment and prior experience; that there is a synormorphy of behavior and milieu and that socialization can be described as the process of learning a wide variety of appropriate behavior milieu synomorphs; and that choice making within the environment provides the opportunity for developing increasingly differentiated ego sets.

The orienting theoretical perspectives of the DCEI are Erikson's conceptualization of developmental stages, Barker's theory of behavior settings, and Cumming and Cumming's idea of ego sets.

These assumptions provided a basis for deciding which of the observations of children's modes of response within the environment should be looked at.

The following summarizes the categories used in the DCEI for the child's mode of behavior, direction of attention, and amount of adult input.

Child's mode of response: rejecting--ignores intrusion, avoids intrusion, actively eliminates or negates, aggressively rejects. Thrusting - is physically active, gives orders, selects, chooses calls attention to self, aggressively intrudes: playful, aggressively intrudes: hostile, asks for help: task oriented, asks for help: affect oriented, gives information: task oriented, gives information: affect oriented, unintentionally intrudes.

Responding--looks, watches, obeys, cooperates, imitates, gives sterotyped response, receives frustration, rejection, pain, receives help: task oriented, receives help: affect oriented, responds to questions, and responds in tactile sensory mode.

Integrating-shows awareness of cognitive constraints, shows awareness of social constraints, attends with concentration, adds something new, exhibits something new, exhibits mutal social interaction, offers sympathy, help, exhibits hostile social interaction, sees pattern, gives structure, tests, and examines.

Child's attention directed to adult, child, environment, group, or dual focus.

Adult input: adult instigation to individual, adult pressure to individual, adult instigation to group, adult pressure to group, or total adult input.

Activity segment structure: activity segment label, program structure, physical setting, play equipment type: open, closed, amount of mobility, social structure, source of initiation and termination, teacher child ratio.

Teacher's relation to activity segment structure: mode of approach, emphasis (lessons taught), influence on activity structure.

Child's relation to activity segment structure: child's action during activity segment, relation to activity structure, interference with functioning, affect, degree of involvement.

Other Evaluation and Assessment Instruments

Assessment Profile for Early Childhood Programs

The Assessment Profile for Early Childhood Programs developed by

Abbott-Shim and Sibley is organized in a series of levels of increasing specificity. The first level is broad and includes four program components: administration, preschool, infant and school age. The next level is more specific and focuses on a number of Dimensions. Each dimension contains a set of standards. Standards are general statements that represent values and expectations. Each standard is supported with specific criteria. Criteria are concrete, observable procedures, behaviors and records.

Self evaluation identifies those aspects of a program that positively contribute to children and those aspects of a program that have been overlooked and require change. Effective self assessment involves a willingness to observe one's self, to question one's actions, and to make changes. Systematic self evaluation is a process of improving the quality of early childhood programs and the first step in preparing for NAEYC accreditation.

Assessment Profile for Early Childhood Programs is comprehensive and includes four components and related dimensions. Administration--physical facilities, food service, program management, personnel, program development. Preshool--safety and health, environment, scheduling, curriculum, interacting, individualizing. Infant--safety and health, nutrition, environment, interacting, individualizing. School age--safety and health, environment, curriculum, interacting, and scheduling.

The Assessment Profile for Early Childhood Programs is a tool for self study and represents a set of standards for early childhood programs. These standards encompass a broad scope of programming for young children, represent specifically stated values, and identify supporting evidence for each value stated. The standards are general enough to apply to a wide variety of early childhood settings, yet specific enough to provide concrete, observable examples of quality programming for children. They are comprehensive and address all dimensions of early childhood programs.

A basic assumption of the Assessment Profile for Early Childhood Programs is that teachers and administrators have significant influence over environments, practices, and experiences which impact the growth and development of young children. Maintaining high quality, physical and social environments for children requires continuous review and planning. Self assessment is a process that heightens awareness of every day routines and provides specific information to be used in guiding program development.

A second assumption of the Assessment Profile for Early Childhood Programs is that program standards and the self study process must reflect the perspective and experiences of the child. Effective evaluation of program practices, as well as policies and procedures, considers the implications for children and leads to improved programming for children.

California Child Development Quality Review System

The Purpose of the California Child Development Program Quality Review System (CDPQR) is to assure the quality of service provided by child day care center. All day care programs funded by the Office of Child Development, California State Department of Education are subject to review by this method. The specific program elements identified for review are: administration, developmental program, staffing, support services, family community involvement.

The CDPQR grew out of a redesign of the CDPE system. The CDPQR instrument is used in two ways. First it is used by the state to monitor and score programs for program quality. For this purpose, the agency is notified at least one month prior to the review and told what materials and which individuals (parents, staff, board members) should be available. The average review takes approximately two days and consists of the following steps: entry meeting, tour of the center, observation periods review of written materials, interviews, and exit meeting.

The review team rates the early childhood program on each of the quality indicators included in the instrument. The reviewer selects the level that best describes the program under review.

The second use of the instrument is for self assessment. In this case, there is no formal monitoring process. The instrument is available to governing or advisory boards and program staff to review their own program. This can be done in preparation for a formal review or to assess particular program aspects of special concern to the agency.

California Infant Toddler Program Quality Review Indicator System

This system is being developed from design components of the CDPE system and the CDPQR system but geared specifically to the infant and toddler age range. The development of this system has been heavily influenced by work being done at Far West Laboratory on a Child Care Video Magazine where this instrument will be the assessment tool in order to determine the strengths and weaknesses of particular infant and toddler programs.

The following are the overall content areas as covered in the system beginning first with the director of an infant toddler program and then focusing on the caregiver in the infant and toddler program.

The infant toddler center director works with other program participants to define a program philosophy and goals based on knowledge about infant and toddler development and care and the program community. Program philosophy and goals are written and distributed to all program participants.

The infant and toddler center director develops policy and procedures for daily program operations, in cooperation with board and staff, based on the philosophy and goals and uses policy and procedures to ensure fairness and consistency for all program participants. Policies and procedures are written and distributed to all program participants.

The infant and toddler center director demonstrated experience and knowledge about the standards for infant and toddler caregivers, child development theory and research, quality programs for infants and toddlers, special needs, parenting, staff supervision and training, business administration, community resources, and the character and needs of the community. The director seeks training or uses consultants or other persons to supplement and increase his or her knowledge. The director advocates for the needs of the children and their families and caregivers. The director promotes the program as one of several services in the community that may share information and resources and provide specific services to each other for the benefit of infants and toddlers and families. The director provides leadership in maintaining adequate funding for the program.

The infant toddler center director works cooperatively with the board to develop philosophy, goals, and policies and keeps the board well informed of all program operations and issues. The relationship between a board and the center and center director will vary from program to program. The center director will need to work with the president of the board to clarify that relationship and the role of the board. The center director can help the board to be useful in developing philosophy, goals and policies while keeping it from getting involved in day-to-day questions of administration. Developing and maintaining a close working relationship with the board president/chairperson is the most important way to delineate these differences, and to develop a spirit of teamwork between board and staff.

The infant toddler center director demonstrates a commitment to the program and all participants supporting their motivation to provide quality care for infants and toddlers. A center director may stay close to the entrance of the center each morning, meeting parents, children and staff with a warm and personal greeting. Later the director might change the day's appointments in order to meet with a staff team that had a hard day. It is essential to the morale, team spirit and dedication of the entire staff. It is also the most effective way of convincing the center's parents that the well-being of their children is the center's strongest concern.

The infant toddler center director works to strengthen the family, supports the attachment of infants and parents, and helps parents and staff to work cooperatively. This goal is crucially important for families of any age child, since it is the family who is the ultimate source of each child's healthy development. Strengthening families of infants and toddlers is even more important, as patterns for a lifetime are beginning to be set. Infants and toddlers need to learn, to explore, to begin to be aware of themselves, and to "fall in love with the world" all through strongly developing attachments with important adults. No center can replace parents as "the most important adults" in a child's life. Instead, staff must seek to support that parental role. At the same time, parents of infants may be particularly anxious or guilty about leaving their children. Some may project this anxiety into jealousy or anger at center personnel, causing tension which will be felt by the child as well. The director needs to be particulary involved in those few cases in which there is reason to believe the family is not supporting the child's development. Developing a strong supportive relationship with each family is every bit as important as developing a close relationship with its infant.

The infant toddler center director works with staff to plan the daily program for infants and toddlers and their families. Ambitious goals, profound knowledge and deep commitment can all fail if a program's implementation has not been well thought out through careful staff work. Without solid planning, the program will have no way to achieve its potential. Staff need to think ahead about their days with the children and plan together so that they know who will replenish diapers when they run out, and who will care for the group while one caregiver spends time with a mother and father and infant who are new to the center. The director can facilitiate this planning between all staff, remind them of areas that may be neglected, and help them plan routines that will free them to focus on the children and enjoy spontaneous interactions and activities.

The infant toddler center director communicates effectively with parents, staff and other participants so that each one knows and understands his or her responsibilities and role, and so that the leaning environment for infants and toddlers includes an atmosphere of cooperation, trust, and understanding. Good communication is essential to staff morale and to continuity in the program for children as they begin to learn they can have an effect on an orderly, expectable environment.

The infant toddler center director makes decisions based on the philosophy and goals of the program and knowledge of infants and toddlers, and the community. The center participants count on the director to make many decisions each day from when to close early because the furnace is not working to whether one staff member would work better with a different team or the younger group of children. Decisions sometimes need to be made quickly and communicated immediately to parents and staff. At other times the director can move more gradually towards a decision involving individuals or all staff and parents in weighing the potential advantages and disadvantages. An effective director will need to evaluate and decide how to make decisions in a way that is efficient but also satisfying and growth-producing for all members of the program.

The infant toddler center director plans and maintains a safe, healthy learning environment in cooperation with other staff. The arrangement and maintenance of space and materials can make a big difference in our feelings and our activities. Infants and toddlers need small, cozy spaces and room to move freely, explore and learn. The light, colors, and room divisions should be welcoming and pleasing for parents and caregivers as well. It is also obvious that infants and toddlers present special health, sanitation, and safety challenges to directors and staff. Directors can help staff realize that children need to feel that their health and safety mater to their caregivers. Signals such as rough hand washing, limiting messy self-feeding, or leaving a baby in wet cloths can create negative feelings in young children.

The infant toddler center director manages the program budget and finances carefully and responsibly to maintain the stability of the program. The training of center directors is, of course, much more likely to have been in child development or possibly social work, certainly not in business management. Yet an active center of any size requires many business skills. In-service workshops for directors of non-profit organizations as well as financial consulting may be essential to the smooth operation of the center. One added reason for developing skills in financial management relates to the board. A number of board members may have much more expertise than the director in financial matters and may be tempted to meddle in staff activities. It is essential that the director set board members' concerns to rest and at the same time utilize their financial skills in fund raising and long-range planning.

The infant toddler center director maintains complete and accessible records on all aspects of the program. Good recordkeeping is essential when a question comes up about a parent's fee payments or when staff become concerned about a child's development. Recordkeeping is a necessary part of keeping a program running smoothly, maintaining good staff morale and the confidence of board and parents. It is equally important as a means of impressing current and potential funders that their funds will be well spent.

The infant and toddler center director prepares complete job descriptions, recruits and hires staff, and provides thorough job orientation in order to attract staff who are well-qualified for infant and toddler care and will contribute to the program. The time and care a director takes to hire and orient qualified staff will be very important to the children and the program over time. Since infant and toddler care is not "just babysitting" or a scaled-down version of preschool, it is essential that the director identify with special qualities and skills required for this age group. The director will need to look for innate qualities that cannot be taught such as enjoyment of infants and toddlers and patience, physical warmth, and sensitivity to young children. In addition, the director will need to identify areas such as observations skills and note taking where new employees can be trained on the job. Directors should also look for the ability and commitment to relate well to other adults, staff and parents.

The infant toddler center director supports staff in meeting the goals and standards for caregivers and provides supervision to facilitate the work of each staff person and minimize the stress of working with young children. Directors are both the inspirations and the first line of support for their staff as they work out the best possible experience for the infants and toddlers in their charge. Directors can let caregivers know clearly and often that they have the most important job of all, taking the minds and bodies of these new human beings into their hands each day. Directors can also provide program guidance and organizational support to help caregivers carry out their tasks. Sometimes a director may join staff, giving a helping hand at feeding times or holding a fretful baby while a caregiver takes a break. The director can also be a wise counselor to staff helping them plan, involving them in making meaningful decisions and reminding them of what is realistic and feasible for the whole program.

The infant and toddler center director supports staff in building cooperative team relationships with each other and a positive environment for infants and toddlers. The director is the individual who sets the tone of the center--who determines the degree to which staff members take work seriously, and the degree to which there is a spirit of teamwork. A positive tone is built through careful observations of staff, evaluation of teams, staff meetings, an open door to concerns and grievances, and organizational back-up. One of the most important areas for the director's attention is guidelines for the resolution of staff grievances and differences--when they can be handled by the parties themselves, when they should be brought to the director, and how resolution will be facilitated. Staff perceptions and understanding (or misunderstandings) about the conflicts are also important, and it may be necessary to share the results of conflict resolution so that all staff have a clear understanding of what happened and why.

The infant and toddler center director supports growth and change for all staff members through regular evaluation and opportunities for training and increased responsibilities. Staff development through evaluation and training is essential to the healthy life of an infant toddler center. It is one of the major lines of defense against the persistent problem of staff "burnout." Evaluations, used positively and sensitively, can transmit a message about the importance of the caregiver as an individual. The director, other supervisors, and trainers can help caregivers think about their work in new ways, guarding against boredom or rigid routines and schedules for infants and toddlers. Caregivers can learn about new possibilities for arranging space, working with parents, planning activities, or using equipment. New insights and challenges can renew the staff's energy and guard against excessive turnover. The stability of satisfied staff members will provide the consistent care that is essential for infants and toddlers.

The infant toddler center director develops and implements an evaluation process for the program, staff and children and integrates the evaluations into the ongoing work for the benefit of infants, toddlers, and their families. An ongoing effort to set broad goals, translate these into manageable, measurable objectives, and then evaluate performance against them will allow the director and staff to see where they are succeeding in their work and where they need to improve. A director can lead staff or consultants in the evaluation process ensuring that all aspects of the program are considered including the director and the relations of staff and infants with families. Staff motivation can be improved if they are involved in setting up objectives to be measured, receiving feedback, and thinking through the changes that may be suggested by evalution.

This section deals with the caregivers interactions with the children.

Children of all ages learn from their own experiences and by imitation. Adults can guide and encourage children's learning by ensuring that the environment is emotionally supportive; invites active exploration, play, and movement by children and supports a broad array of experiences. A reliable routine together with a stimulating choice of materials, activities, and relationships enhances children's learning and development.

Young infants begin to learn from their immediate surroundings and daily experiences. The sense of well-being and emotional security conveyed by a loving and skilled caregiver creates a readiness for other experiences. Before infants can creep and crawl, adults should provide a variety of sensory experiences and encourage movement and playfulness.

Mobile infants are active, independent, and curious. They are increasingly persistent and purposeful in doing things. They need many opportunities to practice new skills and explore the environment within safe boundaries. Adults can share children's delight in themselves, their skills, and discoveries, gradually adding variety to the learning environment.

Toddlers are developing new language skills, physical control, and awareness of themselves and others each day. They enjoy participation in planned and group activities, but they are not yet ready to sit still or work in groups for very long. Adults can support their learning in all areas by maintaining an environment that is dependable, but flexible enough to provide oportunities for them to extend their skills, understanding, and judgment in individualized ways.

One of the most essential services for children is to ensure their safety and well-being. Indoor and outdoor areas should be free of dangerous conditions and materials. Adults should teach children about safety and comfort children when hurt. Adults should be sensitive and have the skills and knowledge to prevent injuries and to handle emergencies, accidents, and injuries appropriately when they occur. In a safe environment, children will learn gradually to protect themselves and look out for others.

Young infants must be attended to carefully. A safe and secure environment is essential to their development. Because of infants' vulnerability and relative helplessness, adults must attend to each individual infant in order to ensure his/her continued safety.

Mobile infants are changing each day. As their rapidly increasing motor skills lead them into new areas, adults must anticipate new hazards that may arise.

Toddlers are increasingly curious about their world. They stretch boundaries and test everything in their surroundings. Adults must be attentive to their activities and ensure their safety while giving them simple explanations for safety precautions.

Good health involves sound medical and dental practices and good nutrition. Adults should model and encourage good health and nutrition habits with children. Food should be nutritious prepared carefully, and served in a relaxed atmosphere. Acute or chronic illness and nutritional problems should be detected and referred for treatment as soon as possible so that children can develop and take full advantage of the program. Prompt care should be given to children who are or become ill or hurt. Children need a clean environment that is properly lighted, ventilated, and heated or cooled. Care of the child's physical needs communicates positive feelings about his/her value and influences the child's developing identify and feelings of self-worth. Parents and caregivers should exchange information about children's physical health frequently.

Young and mobile infants need affectionate and competent physical care geared to their individual needs and rhythms. Adults can help infants regulate their eating, sleeping, and other activities gradually, while continuing to balance the infant's and the group's needs.

Toddlers imitate and learn from the activities of those around them. Good health habits can be established through modeling and encouraging tooth brushing, hand washing, and nutritious eating.

Communication between people can take many forms, including spoken words or sounds, gestures, eye and body movements, and touch. Children need to understand verbal and nonverbal means of communicating thoughts, feelings, and ideas. Adults can help children develop their communication skills by encouraging communication and providing ample opportunity for children to listen, interact, and express themselves freely with other children and adults.

Young infants need adults who are attentive to their nonverbal and pre-verbal communication. Adults can provide better care when they respond sensitively to the individual signals of each infant. Infants' early babblings and cooings are important practice for later word expression. Infants' speech development is facilitated by an encouraging partner who responds to their beginning communications and who talks with them about themselves and their world.

Mobile infants begin to jabber expressively, name familiar objects and people, and understand many words and phrases. Adults can build on this communication by showing active interest in children's expressions, interpreting their first attempts at words, repeating and expanding on what they say, talking to them clearly, and telling simple stories.

Toddlers increase their vocabularies and use of sentences daily. There is a wide range of normal language development during this time; some children are early, and some a e late talkers. Adults should communicate actively with all toddlers--modeling good speech, listening to them carefully, and helping them with new words and phrases. Language should be used in a variety of pleasurable ways each day, including songs, stories, directions, comfort, conversations, information, and play.

All children need a physically and emotionally secure environment that supports their developing self-knowledge, self-control, and self-esteem and, at the same time, encourages respect for the feelings and rights of others. Flexibility, responsiveness, and emphasis on individualized care for each infant and toddler are especially important in providing this security. Knowing one's self includes knowing about one's body, feelings, and abilities. It also means identifying one's self as a girl or boy and a member of a family and a larger cultural community. Accepting and taking pride in one's self comes from experiencing success and being accepted by others as a unique individual. Self-esteem develops as children master new abilities, experience success as well as failure, and realize their effectiveness in handling increasingly challenging demands in their own ways.

Young infants, during the first few weeks and months, begin to build a sense of self-confidence and security in an environment where they can trust that an adult will lovingly care for their needs. The adult is someone who feeds the child when hungry, keeps the child warm and comfortable, soothes the child when distressed, and provides interesting things to look at, taste, smell, feel, hear, and touch.

For mobile infants, a loving caregiver is a "home base" who is readily available and provides warm physical comfort and a safe environment to explore and master. This emotional stability is essential for the development of self-confidence as well as language, physical, cognitive, and social growth.

Toddlers become aware of many things about themselves, including their separateness from others. A sense of self and growing feelings of independence develop at the same time that toddlers realize the importance of parents and other caregivers. The healthy toddler's inner world is filled with conflicting feelings and ideas: independence and dependence, conficence and doubt, fear and power, hostility and love, anger and tenderness, aggression and passivity. The wide range of toddler's feelings and actions challenge the resourcefulness and knowledge of adults who provide them emotional security.

Children need to develop social skills that help them work and play cooperatively and productively with other children and adults. To do this, children need to feel secure themselves, value other people, and enjoy positive social interaction.

Young infants enter the world with a capacity and a need for social contact. Yet each one is unique in styles of interacting and readiness for different kinds of interactions. Infants need both protective and stimulating social interactions with a few consistent, caring adults who get to know them as individuals. The adults' understanding response to their signals increases infants' participation in social interactions and their ability to "read" the signals of others. Mobile infants are curious about others but need assistance and supervision in interacting with other children. They continue to need one or a few consistent adults as their most important partner(s).

Toddlers social awareness is much more complex than that of younger children. Toddlers can begin to understand that others have feelings, too --sometimes similar to and sometimes different from their own. They imitate many of the social behaviors of other adults and children.

Knowing what behavior is appropriate or acceptable in a situation is an important skill. Children develop this understanding when consistent limits and realistic expectations of their behavior are clearly and positively defined. Understanding and following simple rules can help children develop self-control. Children feel more secure when they know what is expected of them and when adult expectations realistically take into account each child's development and needs.

Young infants begin to adapt their rhythms of eating and sleeping to the expectations of their social environment through the gentle guidance of sensitive caregivers who meet their needs. The basic trust in adults and the environment that is established at this time directly affects the child's responsiveness to positive guidance later and promotes the development of self-discipline.

Mobile infants want to do everything, but they have little understanding about what is permissible and cannot remember rules. Adults can organize the environment in ways that clearly define limits and minimize conflicts. While respecting the child's experiments with "no" they can reinforce positive social interaction (e.g., hugging) and discourage negative behaviors (e.g., biting).

Toddlers move through recurring phases of extreme dependence and independence as they gain new skills and awareness. They require an understanding caregiver who remains calm and supportive during their struggle to become independent. Adults must be resourceful in recognizing and encouraging self-reliant behavior while setting clear limits.

Physical development is an essential part of the total development of children. Developing physically includes using large and small muscles, coordinating movements, and using the senses. Large-motor development includes strengthening and coordinating the muscles and nervous system, controlling large motions using the arms, legs, torso, or whole body. Small motor development involves the ability to control and coordinate small, specialized motions using the yes, mouth, hands, and feet. Adults should provide materials equipment, and opportunities for indoor and outdoor activities that encourage this development and recognize and respect the wide differences in individual rates of physical development.

Young infants begin all learning through physical movement, taste, touch, smell,sight, and sound. By moving their arms hands legs, and other body parts, by touching and being touched, infants develop an awareness of their bodies and their ability to move and interact with the environment. By using their mouths to explore, hands to reach and grasp, whole bodies to roll over and sit up they master the necessary skills needed or developmental states that follow.

Mobile infants delight in practicing and achieving new physical skills: crawling, standing, sitting down, cruising, and walking. They interact with their environment in a practical way, using all their senses to examine and manipulate objects, and begin to understand cause and effect, space, and distance in this way.

Toddlers continue to master physical skills at their own individual rates. Their learning and interacting with the environment continue to be active. Although they are gaining greater control and satisfaction through use of their small muscles (e.g., painting, drawing, or working with puzzles), they need opportunities to exercise their large muscles often each day.

Exploring and trying to understand the world is natural and necessary for children's cognitive or intellectual development. As children learn and grow, their thinking capacities expand and become more flexible. Adults should support and guide this process by joining children's play, responding to children's interests with new learning opportunities and to their questions, with information and enthusiasm. Cognitive growth also requires healthy development in other areas: consistent physical growth, secure emotional behavior, and positive social interaction.

Young infants begin cognitive learning through their interactions with playful caring adults in a secure environment. Some of their early learning includes becoming familiar with distance and space relationships, sounds, similarity and differences among things, and visual perspectives from various positions (front, back, under, and over).

Mobile infants actively learn through trying things out; using objects as tools; comparing; imitating; looking for lost objects; and naming familiar objects, places, and people. By giving them opportunities to explore space, objects, and people and by sharing children's pleasure in discovery, adults can build children's confidence in their ability to learn and understand.

Toddlers enter into a new and expansive phase of mental activity They are beginning to think in words and symbols, remember, and imagine. Their curiosity leads them to try out materials in many ways, and adults can encourage this natural interest by providing a variety of new materials for experimentation. Adults can create a supportive social environment for learning by showing enthusiasm for children's individual discoveries and by helping them use words to describe and understand their experiences.

All children are imaginative and have creative potential. They need opportunities to develop and express these capacities. Creative play serves many purposes for children in their cognitive, social, physical, and emotional development. Adults should support the development of children's creative impulses by respecting creative play and by providing a wide variety of activities and materials that encourage spontaneous expression and expand children's imagination.

Young and mobile infants are creative in their unique and individual ways of interacting with the world. Adults can support their creativity by respecting and enjoying the variety of ways very young children express themselves and act on their environment.

Toddlers are interested in using materials to create their own product--sometimes to destroy and create it again or to move on. For example, they become absorbed in dipping a brush in paint and watching their stroke of color on paper. They use their voices and bodies creatively: swaying, chanting, and singing. They enjoy making up their own words and rhythms as well as learning traditional songs and rhymes. Adults can provide raw materials and opportunities for toddler's creativity and can show respct for what they do. Make believe and pretend appear gradually, and adults can join in imaginative play, while helping toddlers distinguish between what is real and not.

This concludes the review of the California Infant Toddler Program Quality Indicator System. The reason for such a detailed review is that the infant toddler field has very few formative evaluative instruments. Even the CDPE presented earlier in this chapter and the National Academy of Early Childhood Program's accreditation system to be presented next are weak in the assessment of the infant toddler program.

National Academy of Early Childhood Programs

The Natoinal Academyof Early Childhood Program's Accreditation System, a division of the National Association for the Education of Young Children is the major focus of this textbook. All of the instruments in this chapter have common elements with the NAECP system or complement it in some fashion. It is the best standard that the early childhood field has for measuring program quality in child care and early childhood programs.

As was indicated in chapter one, in which the accreditation criteria were used as the basis for the content of the comprehensive program plan, it is in this chapter that the actual evaluation process is dealt with.

The NAECP system is the most comprehensive evaluative review system of those presented in this chapter. When a program begins the process they are committing themselves to a indepth self assessment. The key elements of the system are presented in this section as has occurred with all the other evaluative instruments in this chapter. The NAECP system is the best example of program analysis within a formative evaluative framework. The other instruments in this chapter could be used as pecursor reviews or assessments to the full accreditation assessment.

In the future as more programs become accredited, impact, cost and management evaluations along with program analysis will take the results of the accreditation system as the major measure of program quality.

Organizationally, the accreditation system has several characteristics that are similar to the CDPE system in the use of record review, interviews, and observations. The guidelines for accreditation begin with an indepth review of how to do a self study followed by the necessary forms to be filled out. All recordings are made on an Early Childhood Program description document.

The Early Childhood Program Description has four major sections which cross over the ten component areas as detailed in chapter one. The four sections are the following: administrator report and center profile, staff questionnaire, parent questionnaire, and early childhood classroom observation.

Based on reliability and validity studies of quality assurance regulatory systems certain consistencies were discovered in the relationship of QAR systems and the NAECP system. What follows are the study results.

The twenty (20) criteria from the National Academy of Early Childhood Program Accreditation System presented here are those standards that have consistently appeared in regulatory indicator studies. It is proposed that these regulatory indicators drawn directly from the National Academy Criteria be the minimal standards that all early childhood/child care programs must be in compliance.

The following listing presents the 20 regulatory indicators as identified in the National Academy of Early Childhood Program Criteria:

The daily schedule is planned to privide a balance of activities on the following dimensions:

a. indoor/outdoor.
b. quiet/active.
c. individual/small group/large group
d. large muscle/small muscle

e. child initiated/staff initiated.

Staff provide a variety of developmentally appropriate activities and materials that are selected to emphasize concrete experiential learning and to achieve the following goals:

a. foster positive self-concept.
b. develop social skills.
c. encourage children to think, reason, question, and experiment.
d. encourage language development.
e. enhance physical development and skills.
f. encourage and demonstrate sound health, safety, and nutritional practices.
g. encourage creative expression and appreciation for the arts.
h. respect cultural diversity of staff and children.

Parents are welcome visitors in the center at all times (for example, to observe, eat lunch with a child, or volunteer to help in the classroom). Parents and other family members are encouraged to be involved in the program in various ways, taking into consideration working parents and those with little spare time.

The program is staffed by individuals who are 18 years of age or older, who have been trained in Early Childhood Education/Child Development, and who demonstrate the appropriate personal characteristics for working with children as exemplified in the criteria for Interactions among Staff and Children and Curriculum. Staff working with school-age children have been trained in child development, recreation, or a related field. The amount of training required will vary depending on the level of professional responsibility of the position. In cases where staff members do not meet the specified qualifications, a training plan, both individualized and center-wide, has been developed and is being implemented for those staff members. The training is appropriate to the age group with which the staff member is working.

The number of children in a group is limited to facilitiate adult-child interaction and constructive activity amoung children. Groups of children may be age-determined or multi-age. Maximum group size is determined by the distribution of ages in the group. Optimal group size would be smaller than the maximum. Group size limitations are applied indoors to the group that children are involved in during most of the day. Group size limitations will vary depending on the type of activity, whether it is indoors or outdoors; the inclusion of children with special needs and other factors. A group is the number of children assigned to a staff member or team of staff members occupying an individual classroom or well-defined space within a larger room.

Sufficient staff with primary responsibility for children are available to provide frequent personal contact; meaningful learning activities; supervision; and to offer immediate care as needed. The ratio of staff to children will vary depending on the age of the children, the type of program activity, the inclusion of children with special needs, the time of day,and other factors. Staffing patterns should provide for adult supervision of children at all times and the availability of an additional adult to assume responsibility if one adult takes a break or must respond to an emergency. Staff-child ratios are maintained in relation to size of group. Staff-child ratios are maintained through provision of substitutes when regular staff members are absent. When volunteers ae used to meet the staff child ratios, they must also meet the appropriate staff qualifications unless they are parents (or guardians) of the children.

The indoor and outdoor environments are safe, clean, at ractive, and spacious. There is a minimum of 35 square feet of usable playroom floor space indoors per child and a minimum of 75 square feet of play space outdoors per child.

Age-appropriate materials and equipment of sufficient quantity, variety, and durability are readily accessible to children and arranged on low, open shelves to promote independent use by children.

Each adult is free of physical and psychological conditions that might adversely affect children's health. Staff receive pre-employment physical examinations, tuberculosis tests, and evaluation of any infection. Hiring practices include careful checking of personal references of all potential new employees. New staff members serve a probationary employment period during which the director or other qualified person can make a professional judgement as to their physical and psychological competence for working with children.

A written record is maintained for each child, including the results of a complete health evaluation by an approved health care resource within six months prior to enrollment, record of immunications, emergency contact information, names of people authorized to call for the child, and pertinent health history (such as allergies or chronic conditions). Children have received the necessary immunizations as recommended for their age group by the American Academy of Pediatrics.

If transportation is provided for children by the center, vehicles are equipped with age-appropriate restraint devices.

Children are under adult supervision at all times. Suspected incidents of child abuse and/or neglect by parents, staff, or others are reported to appropriate local agencies.

The building and all equipment are maintained in a safe, clean condition and in good repair (for example, there are no sharp edges, splinters, protruding or rusty nails, or missing parts). Infants and toddlers' toys are large enough to prevent swallowing or choking.

All rooms are well-lighted and ventilated. Stairways ae well-lighted and equipped with handrails. Screens are placed on all windows which open. Electrical outlets are covered with protective caps. Floor coverings are attached to the floor or backed with non-slip materials. Nontoxic building materials are used.

All chemicals and potentially dangerous products such as medicines or cleaning supplies are stored in original, labeled containers in locked cabinets in accessible to children. Medication is administered to children only when a written order has been submitted by a parent, and the medication is consistently administered by a designated staff member.

All staff are familiar with primary and secondary evacuation routes and practice evacuation procedures monthly with children. Written emergency procedures are posted in conspicuous placed.

Staff are familiar with emergency procedures such as operations of fire extinguishers and procedures for severe storm warnings. Smoke detectors and fire extinguishers are provided and periodically checked. Emergency telephone numbers are posted by phones.

Meals and/or snacks are planned to meet the child's nutritional requirements as recommended by the Child Care Food Program of the United

State Department of Agriculture in proportion to the amount of time the child is in the program each day.

The director (or other appropriate person) evaluates all staff at least annually and privately discusses the evaluation with each staff member. The evaluation includes classroom observation. Staff are informed of evaluation criteria in advance. Results of evaluations are written and confidential. Staff have an opportunity to evaluate their own performance. A plan for staff training is generated from the evaluation process.

This concludes the review of formative evaluative instruments and systems. The CDPE system is an example of a program compliance/licensing system; the California system are contract compliance systems; the ECERS, DCEI, Day, Abbott-Shim Profile are examples of program quality systems, while the NAECP system is an accreditation system.

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Chapter 6

This chapter completes our exploration of early childhood program evaluation with two sets of studies. The impact evaluation studies have received more attention than the second set of studies dealing with management and cost evaluations. However, both sets of studies have made a substantial contribution to the research literature.

The impact evaluation studies are the third wave of child care research attempting to detemine the relative impact of day care settings on children's development. These studies were conducted by some of the most prominent child care researchers in the field. Each of these studies is summarized followed by a general findings session. These results are taken from Dr Phillips' book **Quality in Child Care: What Does Research Tell Us?** These studies combine assessments of children with formative evaluative instrument assessments.

The management and cost evaluations are the result of a new avenue of program monitoring and cost monitoring that has produced some very significant results. These studies were completed in Pennsylvania and California. They compliment the impact evalution studies but also add a new dimension to child care research.

Impact Evaluations

The first wave of research in child care discovered that children in good quality child care show no signs of harm, and children from low income families may actually show improved cognitive development.

The second wave of research was launched with the National Day Care Study and the Federal Interagency Day Care Appropriateness Study. These studies atempted to identify key provisions that best predict good outcomes for children, to develop cost estimates for offering these provisions, and promulgating these provisions as day care standards.

The third was of research attempted to expand on the above by using several of the evaluative instruments described in chapter five, attempting to measure other factors, particularly aspects of the family environment, that affect child development and relating these to several outcomes of children's development, as measured by several assessment techniques in chapter two, while in child care. The following sections summarize the major highlights of five studies that deal with these three interrelated issues.

Clarke Stewart's Chicago Study

Children whose development was advanced not only had the advantage of being in high quality child care programs but also came from families who gave them support, stimulation, and education.

Although more emotion was expressed in home care arrangements, there were fewer planned activities and children spent more time alone or watching television. Group programs offered children more opportunities for education, interaction, and socialization than home care programs.

Children with untrained caregivers in their own home, with one other child (usually younger) at most, and with no educational program did not excel in any domain of competence. For the preschool child, there may be benefits from having more people around than just a solitary caregiving adult.

Children were develomentally advanced when the home was neat and orderly, was organized around their activities, and contained fewer adult oriented decorative items. The more teacher directed, demanded, controlled, and punished children the worse they performed on tests of cognition and cooperation with adult strangers. Children who were more competent in tests attended programs where they were given freedom to learn.

When the physical environment was safer and more orderly, and contained more varied and stimulating toys, decorations, and educational materials appropriately organized into activity areas, children did better on tests of cognitive skills and social competence with adult strangers.

More was not always better, and less was not always worse. A moderate level of the feature often turned out to be optimal.

Phillips, Scarr, & McCartney Bermuda Study

Higher quality programs were also associated with greater verbal interaction between caregivers and children, as well as lower rates of caregiver turnover.

Children's performance on the measures of intellectual and language development were influenced primarily by staff child ratios and amounts of caregiver child verbal interaction.

Parents who placed a high value on social skills and a low value on conformity selected higher quality child care centers. The program's overall quality score was most highly associated with director's experience. The overall quality of the child care environment made a significant contribution to children's social and language development.

Children clearly profit from a verbally stimulating environment in which adults frequently talk with children. Higher child care standards will positively affect the development of children. Specific features of good programs are amendable to regulation and parents can observe these features when selecting child care.

The amount of verbal interaction directed to children by their caregivers emerged as the strongest predictor of positive child outcomes in child care.

Kontos and Fiene Pennsylvania Study

Family background is the most salient determinant of development in children attending child care centers whose quality varies from adequate to good.

Floor of quality (quality assurance regulations) appears to be different from a professional standard of quality (quality assurance enhancements), and the floor of quality measures appear to be somewhat different from one another.

Capacity, group size and ratio were the structural characteristics most consistently related to any aspect of quality. The lackof statistically significant effects for individual center characteristics on children's development is certainly not a sign that policymakers are free to deregulate child care without fear of harming children.

There appears to be a curvilinear and not linear relationship between quality assurance regulatory instruments and quality assurance enhancement instruments in which specific regulatory indicators had a significantly larger impact on overall quality than originally hypothesized.

Howes Los Angeles Study

Parents observe teachers for suggestions of ways to engage with their child. Thus, trained teachers engage in informal parent education. The number of children with whom each caregiver can engage in a stimulating and sensitive fashion is by necessity limited.

The child who forms attachments to a series of caregivers may find it too painful to continue the cycle and conclude that human relationships are to be avoided.

The pattern of behaviors of the teachers and parents of children in high quality child care suggests a consistently high degree of adult participation in the socialization of the child, a persistence in resolving episodes, and a willingness on the part of adults to negotiate compromise.

Working parents who are more competent and confident in their parenting are more likely to be associated with high quality child care. Both families and children appear to have more optimal development when infant and toddler child care includes one adult for a small number of children, stable caregivers, and caregiver training.

Goelman and Pence Victoria Study

Both center and licensed family day care providers reported levels of job satisfaction significantly higher then their unlicensed family day care counterparts. The unlicensed family day care settings were consistently lower than the licensed family day care and center settings on every subscale as well as the total score.

Children in unlicensed family day care watched television more frequently than children in the other two types of programs. Level of caregiver education was a significant predictor of the children's test performance.

Children in unlicensed family day care were observed in solitary play significantly more frequently than children in licensed family day care and center settings. More developmentally facilitative play was found in licensed family day care and center programs.

Children who come from low resource families generally attend low quality family day care.

The last series of analyses was an attempt to identify common indicators from the five studies summarized above. The following listing presents the best predictors of advanced child development and quality child care from these five impact evaluation research studies.

The following five indicators are key variables related to advanced child development:

a licensed program (usually in a center);

in which the child's interaction with the caregiver is frequent, verbal, and educational, rather than custodial and controlling;

in which children are not left to spend their time in aimless play together;

in which there is an adequate adult child ratio and group size;

in which the caregiver has balanced training in child development, some degree of professional experience in child care, and has been in the program for some period of time.

Management and Cost Evaluation Studies

Fiene and Aronson Compliance Studies

As has been presented in the previous section, Impact Evaluation Studies, the concern for evaluating child care and early childhood programs grew out of the initial studies on day care as an intervention to ameliorate child development deficits in children from low income families. These early day care evaluations pioneered by Lazar, Darlington, Murray, Royce and Snipper; Weikart, Bond, and McNeil; Ramey and Haskins; Miller and Dyer; and Keister were the first and second waves of child care research. These studies attempted to determine the beneficial or deleterious effects of day care on children's development.

These initial studies have been followed by a series of day care studies to ascertain the impact of varying levels of day care quality on children's development (these were presented in the previous section of this chapter and have been characterized as the third wave of research on child care effects).

An issue that has not been addressed by these three waves of day care research and evaluation studies is how to develop an ongoing process of day care monitoring and evaluation that centers not only on impact but also on cost and management evaluation and has the ability to do program analysis/monitoring/assessing implementation as well. Attempts have been made in the past to highlight exemplary state day care regulatory, monitoring and evaluation systems. However, it has only been recently that a child care regulatory, monitoring and evaluation systems model holds promise as an effective and efficient means of ensuring day care program compliance and quality.

The model is based on a concept of identifying key indicators and predictors of program quality and regulatory compliance (management evaluation and program analysis) that have a positive impact on child development (impact evaluation). These indicators have also been correlated with unit cost information to determine cost efficiency coefficients (cost evaluation).

In the previous section, the Pennsylvania study used this indicator systems approach as a policy research model in determining what regulatory compliance indicators had a positive impact on child development assessments.

Along with the Pennsylvania Study, a consortium of six states was formed to conduct several management, cost and impact evaluation studies as well as program analysis studies. This consortium utilized the indicator systems aproach and attempted to answer three evaluation and research questions: 1) Does compliance with state child care regulations have a positive impact of children? 2) Are their predictors of program quality? 3) Is there a ceiling on cost where program do not improve in their commensurate quality?

There has been an attempt to identify the relationship between program quality and compliance with state day care regulations and child development outcomes. This has been addressed in the previous section in the five studies. However, the relationship between program quality and program compliance which could give some direction to states' as they develop their day care regulatory and monitoring systems has not been addressed and was the focus of research of the consortium. The results of this research is presented in this section.

There has been an assumption in day care licensing and monitoring that full compliance with state day care regulations is an indication of program quality. It has been hypothesized that as compliance increases with state day care regulations, a corresponding and equivalent increases in program quality will also occur.

This hypothesis was not totally supported in the consortium studies. The data indicate that the centers with low compliance scores had the lowest program quality scores. This was expected and the results supported it. However, the centers that were in substantial compliance but not full compliance had the highest program quality scores, while those centers in full compliance had lower program quality scores. This was not expected. In other words, the worst programs had low compliance scores, but the fully compliant programs were not the best programs.

Another significant result from this second set of analyses in the consortium study was the identification of a series of regulatory and program quality items that correlated with the overall compliance and quality of the day care programs evaluated. These items can be grouped into the following generic categories or factors: the day care program has an effective overall administrative structure; the day care program consistently implements the child development curriculum emphasizing the use of language, freeplay opportunities, and interest centers; and the day care center administration emphasizes parental participation (see chapter five where the QAR system was cross validated with the NAECP system (QAE system).

The last analysis performed was to determine the relationship between compliance with state child care regulations and unit cost (cost benefit analyses--from chapter four). An interesting relationship was discovered in which unit cost increased at a uniform rate but program compliance scores (quality assurance regulations) followed a diminishing effect curve. Child care programs only got better if a state spent more money up to a particular point and then the program did not get any better above this particular ceiling on unit cost.

This last finding has been supported and expanded by a series of quality and cost studies completed by Dr. Michael Olenick, formerly of UCLA. The next section summarizes Dr. Olenick's studies.

Olenick Studies

The studies reported in this section of chapter six were completed by Dr. Michael Olenick while he was a Bush Fellow at University of California at Los Angeles. In these studies, there were several research and evaluative questions that were answered, such as: Does the amount a child care program spends per child make a difference in quality? What difference does state subsidy of child care make in program quality? and What are the key characteristics of those high quality programs/ The first two questions are similar to the cost question asked by Fiene and Aronson in their Compliance studies. The last question is similar to the evaluation question asked by Fiene in his compliance indicator study. The first two questions are cost evaluation questions while the third is a management evaluation questions.

The answers to the first two questions were "YES". The more money that is spent, the higher the quality of the program. And state subsidy does make a difference in that more of the state subsidy programs were found in the high quality group. Not only does spending more money but the spending of more money on staff had a high relationship with the overall quality of the program. But what are the characteristics of these high quality programs.

The following characterized the low and high groups of quality as determined by scores on the **Early Childhood Environment Rating Scale** and the **Day Care Environment Inventory** (See chapter 5). The programs in the lowest quartile group had the following characteristics: their schedules were very rigid leaving no time for children to pursue their own interests. All morning time including custodieal time consisted of teacher directed and teacher controlled activities. Group activities occured all morning long so there were few instances when children and adults interacted individually or interacted in small groups of two to three children. Adults were unresponsive to children unless children were misbehaving. The overall tone was fairly negative with losts of loud voices and negative affect on the part of adults. Children were expected to follow the rules, respond as a group, and were not supposed to interact with their peers.

Children were seldom observed reading books, being read books or allowed to engage in activities which would allow them to understand and develop receptive or expressive language skills. Concepts were presented in a fashion which was too complex for children. Children were expected to learn through experiences presented in a manner which was rigid, didactic, and geared to the attention levels of older children.

The space used for gross motor activities had little or no equipment on it. When there was equipment on the yard, it had little variety, was not used, or was dangerous. The scheduled time for gross motor activities was very limited and was usually referred to as recess time. Outdoor supervision was minimal although adults were available to mediate conflicts. Child aggression was high during outdoor time.

Programs in the highest quartile were characterized by a great deal of individualization for children. There was a balance of structure and flexibility with smooth transitions between activities. Activities were planned so that materials were available before the activity period began. Alternate activities were provided for children whose needs were different than those of the majority of children. Adults interacted with children, discussing ideas and helping with resources to enhance activities. Adults observed children and activities and stepped in to facilitate the activity as needed. There were ample opportunities for supervised activities both indoors and outdoors with a wide range of activities available. Supervision was used as an educational interaction. Whole group gatherings were limited so that they were suitable to the age of the children. Groupings were planned to provide a change of pace during the day. One to one activities predominated so that some children would be engaged in a free choice activity while others were involved in a small group with an adult attending. Adults carefully observed activities and intervened to prevent problems before they occurred. Adults discussed with children ways in which a problem might be avoided before it became a serious one. Emotions and social skills were included as a regular part of the curriculum. Children and staff seemed happy. Adults were warm in their interactions.

Outdoor space was adequate in size, incorporated dramatic play and construction equipment but was also imaginative and flexible. The equipment was frequently rearranged so that children often had new challenges. The equipment offered challenges at a variety of levels. Grossmotor activities included both planned and unplanned activities so that adults offered organized or semi-organized games for children who wanted them. Adults conversed with children about various concepts during the outdoors time period, enhancing play.

A significant note on why the particular formative evaluative instruments and the summative evaluation studies were selected for inclusion. All were scientifically valid and reliable, on the cutting edge of the research field in child care/early childhood education, and were based on a solid research foundation. They represent the latest research in the field. The reason for excluding other very useful and fine instruments and studies was that the necessary validity and reliability studies were not addressed. Another criterion was the interrelationship each tool or study has either directly or potentially with the NAEYC accreditaion system.

Conclusion

The purpose of this text was to provide an overview to early childhood program evaluation focusing on the formative, program monitoring perspective to evaluation. Chapter one presented where program evaluation fit into early childhood education giving a structure (comprehensive program plan) and content (NAECP accreditation criteria). The NAECP criteria became the organizational content principle throughout the text.

Chapter two addressed what is more traditionally thought of when defining evaluation in education, the assessment of children. This chapter was important to provide a basis for particular approaches to individual assessment, but it also provided the context for understanding impact evaluation which was introduced in chapter three and then detailed in chapter six. In reviewing the individual assessment instruments it became evident that there were more similarities than differences amongst many of the instruments presented. Content areas overlapped a great deal. This would also be the case with the formative evaluation instruments in chapter five.

Chapter three gave a brief outline to summative and formative evaluation delineating the types of evaluation. Formative evaluation in particular program analysis was highlighted because of the lack of adequate measurement instruments even though this is probably the most engaged in type of evaluation in the early childhood/child care field.

Chapter four further clarified the distinctions between program evaluation and program monitoring (formative evaluation/program implementation) at a conceptual and system elements level. This presentation was further developed to show the relationship between the system elements and systems assessment of the various elements and how these related to the types of evaluations presented in chapter three. The shortcomings of state monitoring and evaluation systems as it related to data and system integration, reduction, and utilization of program compliance (program implementation/analysis) systems was highlighted. Finally this chapter dealt with attempting to deal with the problem of measuring program implementation outlining the advantages and disadvantages of records, observations, and interviews.

Chapter five built on chapter four in giving specific examples of formative evaluation systems and instruments that have been and can be used for measuring program implementation in a reliable and valid data collection manner. Four major systems that have been used since the 1970's were highlighted and summarized. Three other newer systems were also highlighted and summarized. The interesting factor in all the systems were the common elements they all shared with the NAECP accreditation system. This system was also highlighted in terms of the cross validation of quality assurance regulatory systems with the NAECP accreditation system.

The last chapter dealt with summative evaluation studies, in particular impact, cost and management evaluation research studies. All these studies used several of the individual assessment child instruments highlighted in chapter two and the formative evaluative instruments highlighted in chapter five. Many of the findings will help programs in their design of high quality early childhood settings for children.

The other major section in the last chapter dealt with cost and management evaluation studies that used the formative evaluation instruments from chapter five and the cost/fiscal systems that were introduced in chapter four. The findings from these studies provide child care and early childhood policymakers with the ability to make well informed policy decisions utilizing valid and reliable data from two monitoring systems--program compliance and fiscal reimbursement systems.

Hopefully this book has provided a contextual framework for organizing and thinking about program evaluations of early childhood programs. The reader should be able to use this text as an organizational guide in cenceptualizing the evaluation of their respective early childhood or child care program. It should also help state personnel to conceptualize the types of evaluations one can undertake at a large systems level and should help in providing data for establishing a better balance between program compliance (quality assurance regulatory systems) and program quality (quality assurance enhancement systems).

The purpose of this book is to provide this organizational framework for the reader and not to fill in all the content pieces. There are several excellent texts that deal with the content issues much more effectively and many of these have been mentioned within the context of this text or are listed in the readings that follow.

What is unique about this text and makes a contribution to the field is its organizational nature in tying outcomes for children with the latest formative evaluative instruments both at a quality assurance regulatoryand enhancement level and then typing these data to cost data. Special emphasis placed on the need for more effective and efficient formative evaluative/program analysis and program implementation measures is a critical contribution of this text.

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